

# **For Reference**


---

**NOT TO BE TAKEN FROM THIS ROOM**



Ex libris  
UNIVERSITATIS  
ALBERTAENSIS





Digitized by the Internet Archive  
in 2023 with funding from  
University of Alberta Library

<https://archive.org/details/Rafferty1971>



THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES

THE UNIVERSITY OF ALBERTA

AN EXPLORATORY STUDY OF KINDERGARTEN

AND ELEMENTARY SCHOOL AGE CHILDREN'S

VERBAL RESPONSES TO PAINTINGS

by



Pat Rafferty

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF EDUCATION

DEPARTMENT OF ELEMENTARY EDUCATION

Date *October 27, 1971*

EDMONTON, ALBERTA

FALL, 1971





## ABSTRACT

The Problem. The study examined the verbal responses of children in kindergarten and grades one, two and four as they attended to reproductions of paintings, and was undertaken to provide descriptive data pertaining to:

children's perception and understanding of the range of qualities and characteristics found in paintings;

children's concepts about paintings categorized according to the four processes of art criticism: description, formal analysis, interpretation, and evaluation, and as being cognitive or affective; and

children's preferences for particular paintings.

Procedure. 155 children were selected from the Edmonton Public School Board and the University of Alberta, Edmonton, Alberta, with consideration for sex, age, grade and socio-economic status. Each subject was individually administered the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale by the researcher. For the Wilson Test the subject was requested to "tell all" about a painting of his choice selected from eight paintings. For the Groome Test the subject responded to predetermined questions directed toward the second painting of the subject's choice. Responses were recorded on a tape recorder and transcribed for scoring.

Findings. (1) Age in the present study is not a useful indicator of the child's ability to operate at the various levels of the Wilson Test (Description, Formal Analysis, Interpretation, Evaluation) and the Groome Test (Cognitive, Affective); (2) Knowledge of sex and socio-economic status does not offer any significant indication of ability to respond to paintings; (3) There was a significant differ-





ence in scores of the verbal responses between kindergarten and grade four students at all levels of both tests. The highest scores were attained at the Description level of the Wilson Test and in the Cognitive category of the Groome Test. Kindergarten children used almost exclusively the Description level of the Wilson Test by simple identification (dog, horse, red), and responded less frequently beyond this level than the children of grades one, two and four; (4) There were no significant differences among scores of the responses of grade one, two and four children at any level of the Wilson Test. The kindergarten and grade one children scored less frequently in the Affective category of the Groome Test than grade two and four children; (5) A significant relationship existed between preferences for specific paintings and the variables of sex, grade and socio-economic status.

Conclusions. Children across the sample relied heavily on a cognitive type of responding that gave emphasis to the literal aspects of the paintings discussed. This behavior appears not to have adequately acknowledged the affective behavioral dimension involved in responding to works of art. Intuition, pleasure, fantasy, contemplation, and imitation are as meaningful to art as those experiences that facilitate cognitive behavior.

While it is assumed that the school and home environment are influential factors, the unique position of each in determining the quality of a child's response to an art object can only be ascertained by further research.



## ACKNOWLEDGEMENTS

This exploratory study was accomplished with the assistance, encouragement and cooperation of many people who gave time and effort to help the writer in its completion.

The writer expresses gratitude to the supervisor of the thesis, Dr. B. Schwartz, for his invaluable assistance and advice at every stage of the study.

Thanks are also extended the Edmonton Public School System and the Faculty of Education, University of Alberta.





## TABLE OF CONTENTS

Chapter	Page
I. THE PROBLEM.....	1
INTRODUCTION.....	1
SPECIFIC STATEMENT OF THE PROBLEM.....	6
QUESTIONS TO BE ANSWERED.....	7
DEFINITION OF TERMS.....	8
ASSUMPTIONS.....	9
LOGICAL STRUCTURE FOR THE STUDY.....	10
SIGNIFICANCE OF THE STUDY.....	15
LIMITATIONS OF THIS STUDY.....	16
II. REVIEW OF RELATED LITERATURE AND RESEARCH.....	17
CHILDREN'S RESPONSES TO WORKS OF ART AS RELATED TO ART STRUCTURE.....	17
CHILDREN'S RESPONSES TO WORKS OF ART AS RELATED TO SUBJECT MATTER PREFERENCES.....	22
ORAL LANGUAGE DEVELOPMENT OF CHILDREN AS RELATED TO RESPONSES TO WORKS OF ART.....	26
III. THE RESEARCH DESIGN AND PROCEDURES.....	30
SAMPLE.....	30
PROCEDURE FOR COLLECTION OF DATA.....	31
THE INSTRUMENTS.....	33
RATIONALE FOR THE SELECTION OF PAINTING REPRODUCTIONS.....	39





Chapter	Page
IV. ANALYSIS AND INTERPRETATION OF DATA	42
PROGRAMS USED IN THE ANALYSIS OF DATA.....	42
QUESTION 1.....	44
QUESTION 2.....	49
QUESTION 3.....	53
QUESTION 4.....	55
QUESTION 5.....	56
QUESTION 6.....	61
V. SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS FOR FURTHER RESEARCH.....	68
SUMMARY OF THE STUDY.....	68
The Problem.....	68
Procedures.....	68
Major Findings.....	69
Some Limitations of the Study.....	73
Conclusions.....	74
IMPLICATIONS OF THE STUDY FOR ART EDUCATION..	80
RECOMMENDATIONS FOR FURTHER RESEARCH.....	82
BIBLIOGRAPHY.....	85
APPENDICES.....	90
APPENDIX A. PERSONAL DATA SHEET.....	90
APPENDIX B. PAINTING REPRODUCTION USED IN THE STUDY.....	92



	Page
APPENDIX C. ADMINISTRATION OF THE WILSON ASPECTIVE PERCEPTION TEST AND THE GROOME ART APPRECIATION RESPONSE SCALE.....	94
APPENDIX D. SCORING PROCEDURE FOR THE WILSON ASPECTIVE PERCEPTION TEST.....	96
APPENDIX E. SCORING PROCEDURE FOR THE GROOME ART APPRECIATION RESPONSE SCALE....	100
APPENDIX F. EXAMPLES OF SCORING OF STUDENTS' RESPONSES ON THE WILSON ASPECTIVE PERCEPTION TEST.....	103
APPENDIX G. TAXONOMIES OF THE COGNITIVE AND THE AFFECTIVE DOMAIN-CRITERIA.....	107
APPENDIX H. SAMPLE OF THE SCORING PROCEDURE USED FOR THE GROOME ART APPRECIATION RESPONSE SCALE.....	112
APPENDIX I. TABLES OF ANALYSIS OF VARIANCE ON SUBTESTS AND TOTAL SCORES OF THE WILSON ASPECTIVE PERCEPTION TEST AND THE GROOME ART APPRECI- ATION RESPONSE SCALE.....	116
APPENDIX J. MEANS AND STANDARD DEVIATION TABLE OF THE WILSON ASPECTIVE PERCEP- TION TEST AND THE GROOME ART APPRECIATION RESPONSE SCALE.....	125





# LIST OF TABLES

TABLE		Page
I.	SOURCE OF THE SAMPLE.....	32
II.	TAXONOMY CATEGORIES OF THE WILSON ASPECTIVE PERCEPTION TEST.....	35
III.	CATEGORIES, CODE AND SCORE RANGE OF THE TAXONOMY.....	37
IV.	INTERCORRELATIONS OF AGE, SOCIO-ECONOMIC STATUS, THE WILSON ASPECTIVE PERCEPTION TEST AND THE GROOME ART APPRECIATION RESPONSE SCALE.....	43
V.	RELATIONSHIP BETWEEN SEX AND CHOICE OF PAINTING.....	62
VI.	RELATIONSHIP BETWEEN GRADE AND CHOICE OF PAINTING.....	63
VII.	RELATIONSHIP BETWEEN SOCIO-ECONOMIC STATUS AND CHOICE OF PAINTING.....	64





## CHAPTER I

### THE PROBLEM

#### INTRODUCTION

What will we do with our new security and our new leisure? Where will we go on our beautiful new interstate highways? How will we spend our longer, economically secure lives? There is a real danger that if we do not broaden and deepen the artistic life of our society, our promised utopia will be one of the most oppressive, boring societies the world has ever known. (Bingham, 1968, p. 20)

This decade witnesses a deepening concern by man for his environment. Pollution of the environment generally has been acknowledged by adults and children all over the North American continent as a major threat to the survival of mankind. However, the kind of pollution popularly coined "eye pollution" which has caused visual havoc in the natural environment does not appear to get the same kind of attention. Tantamount to the problem of "Where will we go on our beautiful new interstate highways?" is Joseph Shannon's (1970, p. 29) urgent observation:

our highways are a visual safety hazard for the driver; their neon nightmare does little to make his trip comfortable or easy.

Man's privilege to move freely in his environment is being obstructed by what Shannon calls, "The chaos of signs, billboards, junk architecture and window dressing" which visually compete for attention. This bombardment and exploitation of the sensibilities



is not yet understood as a danger to the "quality of life" since recent preventive measures are urged only in those areas that are important to health.

Art education and the recent concern for problems of pollution in our environment might appear to be far removed from each other. On the other hand the visual appearance of the environment in which man lives, whether it be the interior of an art gallery and its artifacts or the river running through the city, are both part of our aesthetic environment and evoke a reaction of pleasure or displeasure. Art educators face a renewed opportunity of making art education more relevant to those social priorities which reflect man's need to curtail the visual degradation of his environment through more discriminating means. Feldman (1967, p. 468) suggests that in order to become more critically conscious and to be effective as a critic it is necessary to be aware of "the form or process or system (if any) we use in arriving at our critical conclusions." McFee (1966, p. 192) sees that the major challenge in art education is "to increase the aesthetic sensitivity of America through education."

Examining the history of instruction in art education and a number of individual kindergarten and elementary art education texts, Grossman (1970, p. 421) found many basic teaching methods in art education which could be grouped into two broad teaching philosophies:





The first includes methods based on the philosophy that artistic abilities are inborn and if the natural growth processes are allowed to mature, the young artist's ability will unfold...Generally, this philosophy dictates that the responsibility of the art teacher is to provide an environment that does not interfere with the child's expressive abilities.

A second approach is based on a philosophy that art is basically a social and human enterprise and is given direction by man's interaction with his environment. With this approach, emphasis is placed on the need for environmental experiences and direct teaching if a child is to develop artistically. According to this orientation, artistic development depends on the child's experiences.

Art education for the child at the kindergarten and early elementary level still appears to emphasize the maturational approach but recent developments have focussed on the child's early years of training in art education with a trend toward more systematic curriculum development. Eisner (1968, pp. 47-48) sees the necessity of art education's emerging from the Lowenfeld age to fulfill a more significant role in child development. This emergence is from an age which emphasized the native and naive character of the developing child by honoring the charm and spontaneity of his art, into a present concern for the importance of the environment in shaping artistic aptitudes, including aptitudes in both the production and the appreciation of art. The recent writings of some art educators (Child, 1964; Ecker, 1962; Feldman, 1967; Rueschoff & Swartz, 1967) place a renewed emphasis on the development of the capacity for more intelligible judgments and critical thinking in the visual arts program of the young child. Self expression and personal creativity through art activities alone do not necessarily guarantee that the child in the





classroom will acquire the ability of discrimination and appreciation of objects and his environment. Schwartz (1969, p. 1) makes the statement:

For fifty years or so art education in our schools has largely been concerned with self-expression and the development of personal creativity. Emphasis upon this as a major goal for art education is reflected in the content of art curricula in our elementary and secondary schools ...it is now regarded as a spurious assumption that appreciation of art will be an outcome of creative studio art activity without a planned program directed to cultivating these capacities.

Salome (1968, p. 28) suggests that training and experience influence to some extent an artist's ability to perceive subtle visual relationships and transmit them into aesthetic forms. He further reiterates that without more systematic curriculum development at the kindergarten and early elementary level, young children fail to develop fully their visual perceptual skills and that such deficiencies influence the way children respond to and organize stimuli.

While some effort has been made to incorporate into existing art education programs at the junior high and senior high levels visual perceptual learning and critical thinking, the kindergarten and elementary level in art has been largely neglected (Anderson, 1964; Grossman, 1970; Janes, 1970; Rueschoff & Swartz, 1967; Salome, 1968). Anderson states that the neglect has been in favour of working with materials. Grossman (1970, p. 432) names Bloom (1956); Bruner (1960), and Hunt (1964) as educators and psychologists who have recently stressed the importance of early educational stimula-



tion.

Cemrel, a comprehensive curriculum program, planned for children of all abilities from kindergarten to grade twelve (1969, p. 1) found that behavioral objectives as stated in existing curriculum guides and pertaining to aesthetic discrimination and judgments are vague and unrealistic in view of present teaching practices. Cemrel was founded on the assumption that students should develop the ability to make informal aesthetic judgments so that they can appreciate and interpret aesthetic qualities in their lives, enjoy beauty more deeply, make intelligent decisions about such practical things as material possessions, as well as participate actively in shaping the cultural life of the nation.

A concern exists in art education for the problem of facilitating in the art curriculum long-range objectives which have within their perspective art instruction and experiences for the child from kindergarten to senior high. Objectives need to be formulated with more emphasis on the process of making discriminating judgments in both the productive and appreciative domains of art. The popular assumption that students who are engaged in art activities over long periods of time and without adult influence will automatically develop a sense of judgment and taste is no longer adequate. It is only through an understanding of the nature of the response to art at kindergarten and early grade levels and consequently through judging children's "readiness for teachers' suggestions and explanations," (Lark-Horovitz, 1967, p. 154) that objectives can be formulated which





underline the relevance of the child's early years in art education. This study is concerned with the nature of the responses of kindergarten and early elementary grade students to works of art.

#### SPECIFIC STATEMENT OF THE PROBLEM

The purpose of this exploratory study is to examine the verbal responses of kindergarten and elementary school age children in grades one, two and four as they attend to reproductions of paintings.

This research will offer descriptive data pertaining to the following:

1. children's perception and understanding of the range of qualities and characteristics found in paintings;
2. children's concepts about paintings as these are categorized according to the four processes of art criticism: description, formal analysis, interpretation, and evaluation;
3. children's responses to paintings as these may be categorized as being cognitive or affective; and
4. children's preferences for particular paintings.

Instruments, empirically tested in other studies by Wilson (1966), Groome (1969), and Ilkiw (1968), writings concerned with the nature of art criticism by Feldman (1967), and conceptions about the domains of educational objectives in the work of Bloom and others (1956) will be important to this study.



## QUESTIONS TO BE ANSWERED

By exploring and scoring the nature of children's verbal responses to works of art with instruments developed and used by Wilson (1966), and Groome (1969) and further modified by the investigator, this study will attempt to answer the following questions:

1. Is there a significant relationship between children's verbal responses to paintings, as measured by scores on the Wilson Aspective Perception Test and
  - (a) age, and
  - (b) socio-economic status?
2. Is there a significant relationship between children's verbal responses to paintings, as measured by scores on the Groome Art Appreciation Response Scale and
  - (a) age, and
  - (b) socio-economic status?
3. Is there a significant relationship between scores on the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale?
4. Is there a significant difference between males' and females' responses to paintings as measured by scores on the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale?
5. Are there significant differences between kindergarten, grade one, grade two, and grade four children's responses to paintings as measured by scores on the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale?
6. Is there a significant relationship between preferences for particular paintings and
  - (a) sex,
  - (b) grade, and
  - (c) socio-economic status?





## DEFINITION OF TERMS

Art Appreciation - all distinguishable aspects of the art object-spectator relationship. (Groome, 1969, p. 9)

Work of Art - a form symbolic of human feeling. (Groome, 1969, p. 40)

Aesthetic Judgment - the extent to which a person's personal preference and support of that preference agrees with an established criterion.

Critical Process Levels - The descriptive, formal analytic, interpretive and evaluative processes considered as levels of talk about art in which students relate information concerning the qualities and aspects they perceive in paintings. These process levels are the essentially four major dimensions of art criticism. (Smith, 1970; Feldman, 1967, pp. 468-470)

Affective - An emphasis on feeling tone, an emotion or degree of acceptance or rejection. (Krathwohl and others, 1964, p. 7)

Cognitive - Recall or recognition of knowledge and the development of intellectual abilities and skills. It includes such activities as remembering, recalling knowledge, thinking, problem solving, creating... (Bloom, 1964, pp. 2,7)

Blishen Scale - A Canadian scale for determining class distinction of groups of people in the Canadian social structure. The scale was devised by Blishen (1961) according to combined standard for income and years of schooling of an individual. For this study the Blishen Occupational Scale was used to determine the socio-economic status of subjects.

Aspective Perception - perception which results in the detection of, or direction of attention toward, a wide range of qualities and aspects which characterize a work of art. (Wilson, 1966, p. 39)

Customary Perception - perception which results in the detection of or direction of attention toward a limited number of qualities and aspects which characterize a work of art. (Wilson, 1966, p. 39)



## ASSUMPTIONS

There are two main factors influencing the situation where perception occurs, the perceiver and the physical object. The perceiver directs his attention to a number of qualities and aspects of the object, depending upon his background and experience.

The formal qualities or aspects that a perceiver observes in a transaction with the art object became the basis for the construction of a taxonomy of categories by Wilson (1966) for describing the verbal responses of the perceiver to works of art. Using a series of questions, Groome (1969), in a similar manner, designed a procedure for eliciting responses to works of art by encouraging the perceiver to vacillate from the whole work of art to parts of the work and back to the whole.

The following is a summary of the assumptions maintained by the researcher for the purposes of this study. These assumptions are derived from the studies of Wilson (1966) and Groome (1969):

1. Perception takes place in a visual situation where there is a transaction between the perceiver and the object perceived.
2. The perceiver's mode of perceiving depends upon his past experiences and influences.
3. Language plays an important role in the perceptual preparation of the individual.
4. The object perceived in the visual situation has its own special character--a set of qualities and aspects with its own ability to "show itself" to the perceiver.
5. The perceiver has a perceptual mode which falls on a continuum with modes ranging from the aspective, when per-





ception is broad and the perceiver attends to a variety of qualities and aspects of the work of art, and the customary, when perception is narrow and limited and the perceiver attends in a passive manner.

The researcher assumes that the Wilson Aspective Test (1966) as revised by Ilkiw and Rafferty and the Groome Art Appreciation Response Scale (1969) as revised by Rafferty are valid measuring instruments. It is further assumed that those paintings selected for the purpose of testing encompass the range of styles discussed by Groome (1969, p. 35).

#### LOGICAL STRUCTURE FOR THE STUDY

Assumptions pertinent to the investigation of the responses of young children to works of art were derived from a logical structure which accepts appreciation of the art object as being contained in two combined experiences:

- (a) The visual transaction between the perceiver and the art object as part of the process involved in arriving at an evaluation; and
- (b) The critical performance as a process for the evaluation of the perceived object.

These two combined and overlapping experiences as rationalized by the researcher comprise the logical structure of the present study.

#### The Visual Transaction Between the Perceiver and the Art Object as Part of the Process Involved in Arriving at an Evaluation

According to Randall (Wilson, 1966, p. 35) perception takes place in a visual situation when there is a transaction between the perceiver and the object of perception. Munro (1956, p. 122) simi-



larly describes the situation as a joint product of many variables interacting at the time, including:

The nature of the work of art--(painting)

The nature of the respondent--(child)

The attendant circumstance--(investigation)

Lanier (1965, p. 7) has developed a set of screens which represent factors that would influence the child as a perceiver in the visual situation. They are as follows:

- (a) social attitudes toward a specific work
- (b) cultural view of the art form
- (c) perceptual skills
- (d) recognition of formal qualities
- (e) knowledge of specific symbols
- (f) associations
- (g) historical identification
- (h) judgments
- (i) relationship of art work to life

The child's mode of perceiving functions in direct relationship with the art object's tendency to show itself. Randall (Wilson, 1966, p. 35) explains how the sensed qualities, like color, operate in the transaction. Grass functioning as "green" is properly said "to be green and it can also be said to have that 'power' of cooperating in that particular way, even when it is not seen."

There exists a number of factors influencing the transaction between the perceiver and the art object which make it multi-dimensional by nature and this complexity of situation is attributed to



cognitive as well as affective elements--meanings as well as feelings working together (Harris, 1966, p. 23).

Hausman's (Groome, 1969, p. 13) theory of intradiction describes the transaction as a process that has a tendency to hold the cognitive and the affective or emotive processes in balance. In elaborating on the theory of intradiction, Hausman places emphasis on a structured transaction between the perceiver and the art object, described as a vacillation from part to whole and whole to part. This is accelerated by an inner necessity to complete the transaction by giving the elements of the work their proper place in the whole.

In his book Aesthetic Quality, Pepper (1970, p. 279) an aesthetician, similarly concludes that there is a structured transaction between the perceiver and the art object:

The picture contains a lot of details but it can also be grasped as a whole. When it is grasped as a whole the qualities of the details fuse into the quality of the whole which is felt as the distinctive character of the total picture. In such a total perceptual fusion one obtains an intuition of the quality of the total situation--that is, of the picture as perceived...Up to a point the analysis of the details of a picture is essential for the full unified intuition of its individual quality. For the total quality is a fusion of the qualities of the details. Hence the appreciation of a picture works back and forth.

Hausman and Pepper's theory implies that the simplest transaction between the young child as a perceiver and the art object is generated by an inclination to perceptually grasp the total object by giving attention to parts of the art object. The sample participating in the present study spans a period of conceptual development, according to Piaget, (Philips, 1969, p. 11) known as the Concrete Oper-





ations Period (2 - 11 years). Since conceptual development is a continual process with many influencing factors, the age ranges given are only approximations. Philips (1969, p. 54) says that the earlier sub-stage of the Concrete Operations Period (2 - 7 years) reflects a capacity for manipulating symbols that represent the environment and events, and that the child can make a simple internal response that represents an absent object or event by means of words and images. In the earlier stage of this period the child is inclined to think in absolutes and he centers on one factor. He cannot consider the relationship of the parts to the whole. The latter part of the Concrete Operations Period (7 - 11 years) is characterized by internalized action which can be returned to its starting point, and integrated with other actions. With increasing age and experience the child becomes better able to analyze and differentiate aspects as they relate to the whole.

#### The Critical Performance as a Process for the Evaluation of the Perceived Object

In the dimension of the aesthetic experience, value is accepted as being located between the art object and the perceiver. Discovering reasons to support value judgments in art is one of the main functions of art criticism (Ice, 1969, p. 14). The perceiver has a tendency to make value judgments and the perceived shows certain objective qualities that invite value judgment.

The chief goal of art criticism is understanding the art object. Feldman (1967, pp. 468-470) sees the ideal critical performance proceeding from the simple to the complex in four stages, in this



order: Description, Formal Analysis, Interpretation and Evaluation or Judgment.

Bingham (1968), Grossman (1970), & Janes (1970) give evidence that children perform at the Description level and even beyond the Description level as early as kindergarten. This appears to contradict the assumption (Benscetic, 1959; Lowenfeld, 1964) that a lack of readiness for the appreciative realm with its full implications (Feldman, 1967) necessitates an art program oriented toward the naive character of the young child as an art producer. Salome (1968, pp. 58-64) observed children's perceptual growth and critical awareness in art to be influenced by training in areas other than art at the kindergarten and early elementary level and that children explore, manipulate and discuss pictures and objects for similarities and differences in areas other than art. While art is generally restricted to production at the kindergarten and early elementary level, art educators (Benscetic, 1959; Harris, 1966; Salome, 1968) provide evidence that children as early as kindergarten make value judgments in regard to what is "good" art.

### Summary

In summary, then, the claims of Hausman (Groome, 1969, pp. 13-16) and Pepper (1970), Feldman (1967, pp. 468-470) and Smith (Pappas, 1970, p. 409) describe two combined and overlapping experiences of which the outcome is claimed as appreciation by Sourieau (Lark-Horovitz, 1967, p. 157). One process, the transaction, between the perceiver and the art object, is a systematic vacillation from whole





to part and back to whole in the process of understanding more about the art object and, the other, the making of a value judgment, proceeds from the simple to the complex, from the specific to the general in the same transaction.

This process which gives importance to statements ranging from the cognitively certain to the cognitively less certain, from the simple to the complex and the specific to the general, parallels the two taxonomies of educational objectives described by Bloom (1956) and Krathwohl (1964). Bloom and Krathwohl attempt to organize the whole range of affective and cognitive responding in logical and hierarchical systems. At the lower level of both taxonomies are arranged the simplest and most concrete kinds of describing and knowing. At the upper end of both taxonomies are arranged the highest levels which are the most complex and abstract kinds of valuing and knowing.

It is on this basis that the researcher contends that children as early as kindergarten and the elementary grades are able to attend to and appreciate the qualities of an art object through simple transactions with the art object, and that value judgments made about the art object by the child could be based on information received during such transactions.

#### SIGNIFICANCE OF THE STUDY

The review of related literature in the area of the visual arts indicates a lack of research on the nature of the responses of children below the grade five level to works of art. Accordingly,



this research will offer descriptive data pertaining to children's perception and understanding of the range of qualities and characteristics of paintings, children's concepts about paintings as these are categorized according to the four processes of art criticism, and children's responses to paintings as these may be categorized as being cognitive or affective. This descriptive data is expected to contribute information useful to a greater understanding of the capacity of children at the kindergarten and early elementary level to respond in the aesthetic dimension of experience. It is also hoped that this study will contribute in some measure towards establishing a more meaningful integration of both the production and appreciation aspects of art in early childhood teaching and curriculum development.

#### LIMITATIONS OF THIS STUDY

The study is restricted to a consideration of only that part of the individual's response which is evident in the verbal response.

For obvious reasons, original paintings of the quality and artistic value acceptable for this study were not available.

Interviews with students will be limited in both time and scope and therefore unusual statements by students made to precise questions will not be pursued for meaning.



## CHAPTER II

### REVIEW OF RELATED LITERATURE AND RESEARCH

In this chapter the researcher proposes to relate through a review of literature and research information pertinent to the following areas:

- (a) Children's responses to works of art as related to art structure;
- (b) children's responses to works of art as related to subject matter preferences; and
- (c) oral language development of children as related to responses to works of art.

#### CHILDREN'S RESPONSES TO WORKS OF ART AS RELATED TO ART STRUCTURE

Lansing (1969, p. 218), in discussing the stages of conceptual development as Piaget has described them, says that the teaching of aesthetics in the kindergarten and early elementary grades must be limited to "that which can be taught without involving high-level abstractions." Bingham (1968, p. 26) uses Piaget's basic theories of the learning process to explain her conviction that concepts peculiar to visual organization can be developed and presented to the child in terms appropriate to the sequential stages of development.

A survey of kindergarten reading-readiness programs by Swenburg and Dykstra, as reported by Salome (1968, p. 61), showed that teachers used extensively picture reading and interpretation strategies that





included varied and advanced space concepts such as ground planes, overlap, diminishing size, raised bases, and linear perspective. Students were asked to interpret pictured action in terms of distance, direction, size and motion. Reviewing an extensive number of picture books designed to refine the child's abilities to describe and think about ". . . differences in form and arrangement . . . larger, smaller, taller, shorter, square, oval, circle, vertical, horizontal, slanted, to the right, and left, above, below or on the line," led Salome (1968, p. 61) to conclude that the concepts children analyze in the pre-primers, are much more advanced than the "spatial concepts anticipated and taught for in child art education at this level." This conclusion is confirmed by Janes (1970), Bingham (1968), and Lansing (1969), who also note the inadequate attention given to conceptual development in art education. Gibson (Grossman, 1970, p. 422), an authority on perceptual development, claims to be more and more convinced that grasping the distinctive features of objects and the invariants of events goes on very early in life. Lewis and Livson (1967) conducted a study (Grossman, 1970, p. 433) on the development of the child's ability to represent spatial concepts. They concluded that children from grades one through six discover progressively adequate means of depicting three-dimensional objects and that instruction and environmental influences can account for the change. When the child is led to think of his experiences and imaginings in terms of color, movements, and texture, these elements will become more vivid to him, thus increasing his awareness.



Brittain (1969, p. 24) sees the role of art education in the kindergarten and early elementary years as an opportunity to help children conceptualize through more significant experiences with objects and with his environment. Brittain gives an example that the child who explores his environment for line and texture has a broader understanding of these elements than the child who uses them as a means of graphic design only. Rueschoff and Swartz (1967, p. 112) give importance to experiences involving the visual art elements so that the child "can more easily respond with feeling and understanding to the world of art."

Kellogg (1969, p. 150) quotes McFee (1961), who advises teachers to "help them [children] see how lines, forms and colors make objects as well as paintings beautiful." McFee (1961) also urges teachers to have children compare their own work to the work of famous painters.

Rueschoff and Swartz (1967, p. 76) reviewed two studies which dealt with instruction designed to develop some frame of reference in art. The data from the studies of Voss (1937), Ausubel, et al. (1956) suggest that: "a significant increase in the ability to analyze the aesthetic organization of a picture occurs after the children are instructed in the principles of art."

Rueschoff and Swartz (1967, p. 75) reviewed and summarized research done on the art preferences of elementary grade children. They concluded that the studies reviewed employed a variety of procedures but have been limited mainly to the subject matter preferences





in painting of children. They summarized these findings directly related to children's responses to art structure as follows:

- (1) Younger children prefer simple pictures.
- (2) Children become increasingly aware of art qualities and pictorial detail as they become older.
- (3) Color preferences change from elementary to subdued colors as children grow in maturity.

In commenting on the results of studies of children's experiences with the qualities of a work of art, Harris (1966, p. 22) makes the statement:

Together, these studies suggest that principles of aesthetic design do exist and can be detected readily by children, given some opportunity. It would seem, also, that the discussion of formal principles is unnecessary to learning discrimination though undoubtedly attention to such principles facilitates such learning.

Janes (1970, pp. 52-57), in a study of the mode of cognitive thought used by seven to eleven-year-old boys and girls in talking about art objects, reports that children of average intelligence, as young as seven years of age, demonstrated a capability of thinking and talking about similarities and differences among art objects when permitted to use their own terminology. Janes claims that the children were able to think and talk about objects which were unfamiliar and which they did not understand or like. She claimed that ". . . all of the children assigned more than two-thirds of the total number of responses on the Art Objects Test to the 'descriptive' categories of conceptualization." A response was categorized as "descriptive" if it described observable parts of an art object or the object as



it appears in totality.

Rump and Southgate (1967, p. 68), in a study of the pictorial interests and preferences of young children, concluded that at first children represent space by simple ground lines in their drawings, but that this does not imply that they cannot perceive perspective. Reviewing the studies of French (1952), Spitz and Hoats (1961) and Harris (1963), Rump and Southgate (1967, p. 68) found evidence that children in the elementary grades showed a preference for simple items with "few elements."

Bingham (1968, p. 22) finds that "small children easily grasp the notion of repeated sounds or shapes or movements and can discern even or uneven repetitions in their own or others work."

Harris (1966, p. 21) reports on a series of studies done at University of Iowa on children's capabilities with compositional unity, balance, and rhythm in graphic form. Harris reported that "young children are not particularly sensitive to these principles but that there is a rapid development in the appreciation of them during the elementary school years."

In a longitudinal study of the perception of fifty children from age two to ten years by Ames, Learned, Meatreaux, and Walker, as reported by Wilson (1966, pp. 28-29), it was pointed out that perception of color, detail and form tended to change as the subjects grew older.

Children's response to and preference for particular colors have been studied extensively. Lark-Horovitz (1967, p. 92) makes the statement that a preference for variety and intensity of color appears



to be related to age. She says " . . . vivid colors are preferred by younger children and more subdued colors by older children." Rue-schoff and Swartz (1967, p. 75), in a review of research on children's art preferences, concluded similarly. "Color preferences change from elementary to subdued colors as children grow in maturity." Rump and Southgate (1967, p. 69) report on a study by Newcomb who found that in writing of the most beautiful thing they had ever seen, 40 per cent of the seven year olds mentioned color, and this proportion even increased with age to 71 per cent of thirteen year olds. Wolff (Lark-Horovitz, 1967, p. 156), reporting on his work with preschool children, says:

Young children have color preferences, but they become manifest only if the color experience is within the orbit of a child's emotional experience.

Rump and Southgate (1967, p. 66) agree with Eysenck (1941a) that Impressionist reproductions are popular with the young, and attributes this fact to their "bright colors" and "subject matter." In summary, the studies reviewed indicate that children as early as kindergarten and the early elementary grades give attention to the structure of an art object, and that this attention enhances the child's awareness.

#### CHILDREN'S RESPONSES TO WORKS OF ART AS RELATED TO SUBJECT MATTER PREFERENCES

Harris (1966, pp. 21-22) found that young children of elementary school age prefer that which is "clear" representationally:

" . . . the young child expresses preference for pictures or the por-





trayal of objects or situations with which he is familiar. He likes them in bright colors." Harris goes on to report that Newcomb (1924) claims "young children respond with aesthetic pleasure chiefly to nature and natural objects."

The relative appreciation of representational as opposed to abstract paintings was studied by Rump and Southgate (1967, p. 66) who collected data on the preferences of young children for representational or abstract painting. They concluded:

Children strongly prefer representational pictures. This is so for all age classes and measures of appreciation. The proportions choosing the more representational paintings are, in order of increasing age-level, 90 per cent., 89 per cent., 67 per cent., and 53 per cent.. It is to be noted, however, that 7 and 11 year olds do not differ, . . ."

Summarizing research and literature on children's subject matter preferences, Rueschoff and Swartz (1967, p. 75) conclude:

- (1) Children's preferences for pictures are largely determined by subject matter.
- (2) In general children prefer pictures of familiar things to things that are unfamiliar.
- (3) Children prefer portraits of their own sex to those of the opposite sex and portraits of children to those of adults.
- (4) Children's choices seem to be guided by the type of pictorial pattern they have tried and understood in their own work.
- (5) Children largely prefer traditional to modern painting.
- (6) Any sex difference in preference for pictures stabilizes as children grow older.

A study by Hartlaub (Lark-Horovitz, 1967, p. 152) found that children value a work of art primarily for its content, not



for its artistic form or structure. Preferences in paintings "originate in the association of their subject matter with reality."

Rump and Southgate (1967, p. 64), in a review of literature (Calkins, 1900; Hildreth, 1936; Valentine, 1962) on children's preferences, found that up to the age of nine years, when asked reasons for preferences, children simply name or describe objects depicted. A study in picture preference is reported as early as 1924 by Williams (Benscetic, 1959, p. 12), who claims a marked tendency in children between 5 and 8 years to like the same pictures. That children in expressing preferences incline toward works of art done in a style resembling their own was observed by Lark-Horovitz (1967, p. 161) who claims ". . . younger children in the schematic stage, for example, favor pictures somewhat like their own and respond to them because of a non-realistic representation that leans toward the archaic in art."

In observing what children like to draw and paint, Kellogg (1969, p. 265) and Lark-Horovitz (1967, pp. 27-51) find that, aside from "humans", the early pictorialism of child art may be grouped under the following headings: animals, buildings, vegetation and transportation.

Rump and Southgate (1967, p. 63) report a study by Berry (1942) who claims that in looking at pictures, "animals appear to draw the greater number of favourites." Lark-Horovitz (1967, p. 152) found that children dislike still-lives, unless the child has a special interest in the objects shown in the painting.





In regard to why young children like representational pictures of familiar objects, McFee (1961, p. 46) observes that there is a tendency for people to identify things by their functions rather than by their visual qualities. Children learn the "thing-like" quality of "ball." McFee gives as an example, children who learn to describe pictures in terms of the activity in the picture to the exclusion of the quality of the picture.

Rump and Southgate (1967, p. 63) found that the closer the ages compared, the greater the similarity in their preferences. Tomlinson (1947) considered that "children, when given the opportunity to choose their own pictures for their classrooms, invariably choose modern examples, works of the post-Impressionists (Rump and Southgate, 1967, p. 68). Berlyne (1968, p. 14) makes the statement that in some conditions a subject will spend less time looking at a pattern that she purports to find more pleasing and will spend more time looking at the pattern judged less pleasing.

Fourth grade elementary children responded with imaginary stories to paintings they were shown and made up titles for contemporary paintings in an investigation by Minuchin (1966, p. 46). Girls were more responsive than boys, more imaginative, more open-minded. Ilkiw (1968, p. 31) found that girls tend to show more freedom and open-mindedness in talking about paintings. Rump and Southgate (1967, p. 70) reported two studies claiming differences in preferences between boys and girls.

The literature and research reviewed indicate that young chil-



dren respond readily to paintings that are representational, child-like and in painterly quality. Young children select representational work, it is observed (McFee, 1961; Salome, 1968; Wilson, 1966), because of a tendency to respond to the "thinglike" quality of the subject matter. This tendency is conditioned by the environment. Paintings that depict familiar subject matter (humans, animals, vegetation, buildings and transportation) seem to get the most attention from young children, and girls respond more readily than boys.

#### ORAL LANGUAGE DEVELOPMENT OF CHILDREN AS RELATED TO RESPONSES TO WORKS OF ART

Grossman (1970, p. 422) sees psychologists and educators (Bloom, 1964; Bruner, 1960; Hunt, 1964) giving more importance to early educational stimulation. Recent studies (Schermann, 1966, p. 266) show that the arrangement of the environment and the child's encounter with it in his early years determine to a great extent the manner of the child's intellectual growth. McPetridge (1969, p. 4) urges educators to provide the child with opportunities to explore his environment through sensory experiences and verbal discourse. Suzanne Langer (Pappas, 1970, p. 172) says that speech is the normal end product of thought. This implies that speech is an essential element in the young child's thinking. Luria (Bruner, 1970, p. 98) discusses two symbolic systems acquired by the young child: the first system involves the experience of the child with directly-perceived stimuli, the second is the acquisition of a system of "verbal elaboration." In discussing the importance of the evolution of the child from one



symbolic system to another Luria comments:

The word has a basic function not only because it indicates a corresponding object in the external world, but also because it abstracts, isolates the necessary signal, generalizes perceived signals and relates them to certain categories; it is the systematization of direct experiences that makes the role of the word in the formation of mental processes so exceptionally important.

Schermann (1968) says that at advanced levels of conceptualizing where the basis is not the physical attributes but common meaning in two situations, it is necessary for the child to have established a type of classification beforehand. Stones (Stones, 1970, p. 246) in a study on the use of verbal labelling on concept formation says:

"Gagne and Bruner also consider language to be important in concept formation, while Inhelder and Piaget stress the importance of language for classification."

Janes (1970, p. 52), in a study of the conceptual modes of children in responding to art objects, comments:

According to Piaget's theory of the development of logical thinking in children, adults and children do not use the same cognitive system in thinking and talking about art objects . . . If children have their own cognitive structures for apprehending objects in the environment, it is essential to depict the mode of cognitive thought that they use in thinking and talking about art objects.

That language is useful in the "mediation of the thought process" is emphasized by McFetridge (McFetridge, 1969, p. 1) and she goes on to say that "children require many opportunities to explore their thinking verbally, to say it in order to know what they think." Lombard (Lombard, 1969, p. 181) states that verbalization is especially significant during "information handling" and he recommends "that





children be encouraged, and indeed, pressured within reason, to verbalize during and after an art experience." Lansing (1969, p. 328), an art educator, agrees here on the importance of verbalization: "Verbal responses are highly desirable because they force the child to concentrate more carefully upon his experience and to learn more about it." Anderson (1965, p. 6), in developing art learning situations for elementary education, states that one of his main objectives at the elementary level is the acquisition of an art vocabulary which aims at broadening concepts about the visual arts. Anderson (1965, p. 3) comments:

There is an evasive point at which the visual properties of whatever one is looking at become assertive in their own way. If the visual experience could always be reduced to word description, there would be no need for art. But words about art can give additional meaning to art. The verbal and the visual work in concert.

McFee (1961, p. 201) comments: "There seems to be little disagreement that more elaborate verbal and visual concepts help children develop more complex art expressions." The Douglas and Schwartz (1967) study reported by Grossman (1970, pp. 424-425) explored the use of language to develop more complete visual concepts in four-year-olds, and concluded that "children were able to comprehend and interpret these art ideas in their own clay products. They were also able to describe and discuss ceramic works in an art context." McFee says (1961, p. 229) that verbalization about art objects should begin at an early age. McFee comments:



Opportunities to make choices and to question one's choices can begin early. To develop independence in aesthetic judgment, early training in making choices and thinking about reasons for choices are important.

Janes (1970, p. 56) cautions art educators against imposing the vernacular of the adult on the young child during discussions with the child about art works. She says that art teachers should " . . . plan conversations about art objects so that children are permitted to express their own terminology." Children naturally seek clues as to how to conform to what is expected of them in order to avoid failure or gain approval. Bruner (Pappas, 1970, p. 95) states that children who tend to be early over-achievers in school are likely to be "seekers after the 'right way to do it' and that their capacity for transforming their learning into viable thought structures tends to be lower than children merely achieving at levels predicted by intelligence tests." Bruner goes on to say that "our tests on such children show them to be lower in analytic ability than those who are not conspicuous in over-achievement."

Language intensifies the child's awareness of the distinctive qualities of his environment by helping to develop and broaden concepts about himself and his environment. Adult modes of structuring language experiences, if not directed explicitly towards the child's level and mode of conceptual development, run the risk of inhibiting the child's response. For the very young child, Smith (1968, p. 29) and Schermann (1966, p. 267) suggest simple situations focussing on the concrete and physical attributes of the stimuli: color, line, shape, and texture.



## CHAPTER III

### THE RESEARCH DESIGN AND PROCEDURES

Chapter three concerns the selection of the sample, description and modification of the instruments employed in the study, the procedures undertaken for the collection and treatment of the data, and the rationale used in the selection of painting reproductions.

Data were collected in the Kindergarten class of the Department of Elementary Education, University of Alberta, and the Edmonton School System. The procedure for collecting the data followed a general routine for each class involved in the study. Data for each subject in the study was collected and recorded by the administration of the Wilson Aspective Perception Test, the Groome Art Appreciation Response Scale and the Blishen Scale.

### SAMPLE

The study was conducted within the Edmonton Public School System and at the University of Alberta during the period comprising May 1 to May 15, 1970. The sample comprised of 28 students of the Kindergarten class, Department of Elementary Education, University of Alberta and 34 kindergarten students, 29 grade one students, 32 grade two students, and 32 grade four students of the Edmonton Public School System. The total number of students in the sample was 155 (See TABLE I). Ages of the students in the sample ranged from six to ten years.





The students in the sample had received some art instruction during the course of their elementary education. The art instruction was confined generally to art activities in painting, drawing and paper sculpture construction. The sample comprised a distribution of 80 males and 75 females with consideration for the following:

age

grade

socio-economic status

#### PROCEDURE FOR COLLECTION OF DATA

An information booklet was compiled for each subject in the study. A completed booklet comprised all the data collected for each subject. Information regarding the age of the subject and the parents' occupation was obtained through the principal of each school. A room was allocated in each school for the administration of the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale. The eight painting reproductions selected (see Appendix A and B) for the purpose of eliciting responses during the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale were randomly arranged in a U-shaped formation. Subjects entered the room individually and sat beside the researcher inside the U-shaped formation. For the purposes of the Wilson Aspective Perception Test, the subject was asked to pick a painting and to tell all he



TABLE I  
SOURCE OF THE SAMPLE

GRADE LEVEL	MALES	FEMALES	TOTAL	SOURCE OF SAMPLE
Kindergarten	7	12	19	E.P.S.B.
Kindergarten	7	8	15	E.P.S.B.
Kindergarten	18	10	28	Department of Elementary Education, University of Al- berta
Grade one	7	7	14	E.P.S.B.
Grade one	8	7	15	E.P.S.B.
Grade two	9	7	16	E.P.S.B.
Grade two	8	8	16	E.P.S.B.
Grade four	8	8	16	E.P.S.B.
Grade four	8	8	16	
TOTAL	80	75	155	

E.P.S.B. = The Edmonton Public School Board



could about the painting (See Appendix C). The subject's response to the painting reproduction was recorded on a cassette-type tape recorder. Upon completion of the first test, the subject was asked to pick a second painting from the same eight painting reproductions and this time to respond to specific questions as part of the Groome Art Appreciation Response Scale (See Appendix C). The responses of the subject recorded on tape were later transcribed in the information booklet for scoring purposes.

## THE INSTRUMENTS

### The Wilson Aspective Perception Test

The Wilson Aspective Perception Test is a taxonomy constructed by Wilson (1966) to direct attention towards the mode of describing and judging a perceiver uses and the qualities and aspects a painting "shows" in a particular transaction. The original taxonomy included 24 categories which describe how a perceiver judges and describes paintings and what aspects the subject gives his attention to in the painting. The taxonomy distinguishes between two broad categories, the Individual Response Mode and the Aspects of Paintings categories. Those categories classed as Aspects of Paintings Categories incorporate the variety of possible ways a painting can "show itself" in a transaction between the perceiver and the painting.

The Wilson Aspective Perception Test was constructed and used by Wilson as a means of recording and scoring the verbal responses which describe perception of paintings by the subject. The Test





distinguishes between individuals who perceive paintings in an as-  
pective manner using many of the categories and those who perceive  
paintings in a customary manner using only a few categories of the  
taxonomy. Wilson developed the taxonomy as a means of ordering a  
subject's verbal description of perception of paintings for the pur-  
pose of systematic observation and consequently for "making inferences  
about the perceptual mode of the individual" (Wilson, 1966, p. 53).  
(see TABLE II).

#### Modification of the Wilson Aspective Perception Test

In considering the taxonomy for the purpose of analyzing the  
language descriptive of the critical process used by kindergarten,  
grade one, two and four children in perceiving paintings, it was  
necessary to estimate the interval of time required with each subject  
and to reorganize the categories to parallel the four critical process  
levels (Ilkiw, 1968).

Eight painting reproductions were used rather than the original  
34 slides in the Wilson (1966) study (See Appendix A and B). It was  
considered that eight painting reproductions was a practical num-  
ber for children of the kindergarten and early elementary grades to  
give attention to in stating a preference. This assumption was con-  
firmed in the pilot study carried out by the researcher previous to  
the present study. In decreasing the original number of paintings  
to eight, consideration was given to the danger of limiting the quality  
of the responses of the subjects. In this instance the position taken  
by Wilson (1966, p. 82) that no realistic number of painting reproduc-



TABLE II

## TAXONOMY CATEGORIES OF THE WILSON ASPECTIVE PERCEPTION TEST

INDIVIDUAL RESPONSE MODE CATEGORIES	Evaluational Mode	Affective Evaluation
	Descriptive Mode	Anecdote-Poetry Affective Description Relational Analysis Synthesis Location Direction
ASPECTS OF ART WORKS CATEGORIES	Sensory Qualities	Shape  Colour  Line  Texture
	Technical Aspects	Media Technique
	Meaning Aspects	Literal Meaning Conventional Meaning Inferred Meaning
	Tertiary Aspects	Modal Aspect Formal Aspect
	Historical	Naming Artist Naming Work Naming Style Context
		Not Classified



tions in the Test could incorporate the entirety of man's artistic production was accepted.

The Taxonomy of Categories of the Wilson Aspective Perception Test appears in TABLE II. Ilkiw (1968) undertook a study of the concepts of art criticism at the seventh grade and revised the Taxonomy of Categories of the Wilson Aspective Perception Test to parallel the four critical process levels as interpreted by Feldman. Feldman (1967, pp. 468-469) describes in detail the principal features of the critical performance which he claims is a systematic way of behaving like a critic. Feldman has divided the performance of art criticism into four stages:

description,  
formal analysis,  
interpretation, and  
evaluation

The taxonomy as revised by Ilkiw (1968) and accepted by the researcher for the purpose of this study appears in TABLE III. Ilkiw found it necessary to make a distinction between six terms in the Wilson Taxonomy by classifying them at both the description and the formal analysis level.

Reference to shape, colour, line, texture, media, and technique by identification only constituted description, whereas stating the qualities of these items indicated formal analysis rating.

The category literal meaning was modified similarly. The category was classed under description when "illusions or recognizable primary aspects are people, animals, plants and inanimate objects."





TABLE III  
CATEGORIES, CODE AND SCORE RANGE OF THE TAXONOMY

CRITICAL PROCESS LEVEL	No	CODE	CATEGORY	SCORE RANGE
DESCRIPTION	1	Lo	Location	0-1
	2	D	Direction	0-1
	3	S <sup>d</sup>	Shape	0-1-2-3
	4	C <sup>d</sup>	Colour	0-1-2-3
	5	L <sup>d</sup>	Line	0-1-2-3
	6	Tex <sup>d</sup>	Texture	0-1-2-3
	7	M <sup>d</sup>	Media	0-1-2-3
	8	T <sup>d</sup>	Technique	0-1-2-3
	9	Lit <sup>d</sup>	Literal Meaning	0-1-2-3
	10	NA <sup>d</sup>	Naming Artist	0-1-2-3
	11	NW	Naming Work	0-2-3
	12	NS	Naming Style	0-1-2-3
	13	Con	Context	0-2-3
FORMAL ANALYSIS	14	RA	Relational Analysis	0+
	15	S <sup>fa</sup>	Shape	0-1
	16	C <sup>fa</sup>	Colour	0-1
	17	L <sup>fa</sup>	Line	0-1
	18	Tex <sup>fa</sup>	Texture	0-1
	19	M <sup>fa</sup>	Media	0-1
	20	T <sup>fa</sup>	Technique	0-1
	21	FA <sup>fa</sup>	Formal Aspect	2-3
INTERPRETATION	22	A-P	Anecdote-Poetry	0-1
	23	AD	Affective Description	0-1
	24	Sy	Synthesis	0+
	25	Lit <sup>i</sup>	Literal Meaning	0-1
	26	CM <sup>i</sup>	Conventional Meaning	0-1-2-3
	27	MA	Modal Aspect	2-3
	28	IM	Inferred Meaning	0-1-2-3
EVALUATION	29	A	Affective	0-1
	30	Ev	Evaluation	0-1
		NC	Not Classified	0-1



Literal meaning was classed under interpretation when the actions or uses of these aspects are given. TABLE III illustrates the modified Taxonomy of Categories (Ilkiw, 1968), the code used in scoring and the range of points awarded each category.

### The Groome Art Appreciation Response Scale

The Art Appreciation Response Scale is a scoring guide developed and validated by Groome (1969) and paralleling the taxonomies of educational objectives as defined by Bloom (1965) and Krathwohl (1964). The Art Appreciation Response Scale was designed to test the effectiveness of a teaching structure in art appreciation based upon the concepts of feeling and form and patterned according to the process of intradiction as defined by Hausmann. The construction of the Art Appreciation Response Scale followed the pattern of the process of intradiction in that it contained items specifically related to the concepts and understandings of feeling and form. The process of intradiction involves a vacillation from whole to part to whole by the viewer of an art object until the components are felt to have assumed unity within the object. As the viewer becomes aware of the interrelations of the elements and principles of a painting he progresses in his understanding of the whole painting. Intradiction based upon the philosophy of a painting being both feeling and form was accepted by Groome (1969, p. 27) as a process of art appreciation.

The pattern of questioning on the scale corresponds to the process of intradiction. Each subject interviewed is asked to ver-



balize his initial reaction to a painting reproduction of his choice; second he is asked more specifically to describe his reaction to the elements of design in the painting reproduction--line, color and shape; third, he is asked to consider the artist's intention, and fourth, he is asked to tell to what extent he feels that the painting of his choice is successful.

#### Modification of the Instrument

In order to retrieve information on responses to paintings Groome compiled a series of questions which followed the pattern of the process of intradiction (See Appendix C). Such an approach attempted to elicit responses to parts of the painting, to the whole painting and then back to parts of the painting.

Because of the age level of the sample in the present study it was deemed necessary to modify the questions in the Groome Art Appreciation Response Scale. In consultation with Dr. Groome it was agreed that the scale should be modified through a pilot study to determine the degree of simplicity required in the questions used and the most appropriate wording of the questions. The modified questions arrived at for the purpose of eliciting responses to painting reproductions from children at the kindergarten, grade one, two and four level are shown in Appendices C and H.

#### RATIONALE FOR THE SELECTION OF PAINTING REPRODUCTIONS

Paintings were used as part of the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale because it was





reasoned that a careful selection of paintings could incorporate most of the qualities and aspects an artist gives attention to in creating a work of art. Since it was necessary to use art reproductions (See Appendix B), it was felt that the quality of a painting was less altered as a two-dimensional reproduction than would be other art forms. Late nineteenth and early twentieth century art was selected over that of any other period because "it offers more stylistic content and technical variety than any other sixty-year period in art history (Wilson, 1966, p. 82).

In narrowing down to eight the great variety of paintings available, style, subject matter, design and technique were considered in relation to children's preferences, as reviewed in studies and research previous to the present study (Benscetic, 1959; Grossman, 1970; Lark-Horovitz, 1967; Rump & Southgate, 1967; Rueschoff & Swartz, 1967).

The eight paintings were selected from the four main categories of painting used by Knapp (Groome, 1966, p. 35). The categories are as follows:

realistic-representational

fantastic-representational

expressionistic-abstract, and

geometric-abstract

In order to maintain consistency in recording and scoring a response it was necessary to limit the study to that part of the student's response that is oral. Since the subjects in the sample represented kindergarten, grade one, two and four, each subject was ex-



pected to respond to only one painting reproduction of his choice for each test. It was considered that no practical number of paintings for the study would incorporate all the qualities and aspects of paintings in the variety of combination that exist and that more than eight paintings would be too fatiguing for a young child to consider. The decision was made to use eight paintings, allowing for a broad selection of sampling styles. The number had to allow for a wide scope of possible responses to encompass all the categories of the Wilson Aspective Perception Test and to measure cognitive and affective reactions on the Groome Art Appreciation Response Scale.

A pilot study undertaken by the researcher during the Saturday Morning Art Program, Department of Elementary Education, University of Alberta, showed that eight reproductions provided a sufficient number of paintings for the sample to deal with successfully.



## CHAPTER IV

### ANALYSIS AND INTERPRETATION OF DATA

In this Chapter the researcher presents the findings, the method used in the analysis of data, and an interpretation of the results within the context of the study specifically, and art education generally. The level of significance used throughout this investigation was established at the .05 level of significance, and in addition, the .01 level of significance was also reported when it occurred.

### PROGRAMS USED IN THE ANALYSIS OF DATA

Questions one to three inclusive, imply possible correlations between scores on the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale and the variables of age and socio-economic status. These questions will be investigated by calculating Pearson Product - Moment Correlations and testing the null hypothesis that  $r = 0$ . (See TABLE IV).

Questions four and five imply differences in males and females and kindergarten, grade one, grade two and grade four children on scores on the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale. A two-way analysis of variance and Scheffe's multiple comparisons of main effects were used to test for differences among these variables.





TABLE IV

INTERCORRELATIONS OF AGE, SOCIO-ECONOMIC STATUS, THE WILSON ASPECTIVE PERCEPTION  
TEST AND THE GROOME ART APPRECIATION RESPONSE SCALE

TEST AND CLASSIFICATION VARIABLES		1	2	3	4	5	6	7	8	9	10
<u>WILSON TEST</u>											
1	Description	1.000	** .434	.022	**212	** .801	.149	** .354	** .340	.030	.067
2	Formal Analysis		1.000	.085	** .221	** .545	** .194	** .304	** .315	.061	-.036
3	Interpretation			1.000	.081	** .568	** .359	** .456	** .498	.154	-.107
4	Evaluation				1.000	** .350	** .340	** .304	** .368	.035	-.131
5	Total					1.000	** .370	** .576	** .599	.119	-.033
<u>GROOME TEST</u>											
6	Affective						1.000	** .371	** .658	.066	-.106
7	Cognitive							1.000	** .936	.101	-.046
8	Total								1.000	.105	-.075
<u>CLASSIFICATION VARIABLES</u>											
9	Age									1.000	-.076
10	S.E.S.										1.000

\*\* Significant at or beyond the .01 level



Question six implies a possible relationship between preferences for particular paintings and grade, sex and socio-economic status. The Chi-square ( $X^2$ ) test will be used to determine the significance of the relationship.

#### QUESTION 1

Is there a significant relationship between children's verbal responses to paintings, as measured by scores on the Wilson Aspective Perception Test and

- (a) age, and
- (b) socio-economic status?

#### Findings Regarding Age

In examining TABLE IV, a non-significant correlation of .119 was found to exist between the total scores on the Wilson Aspective Perception Test and children's chronological age. Similarly, non-significant correlations were found between Description (.030), Formal Analysis (.061), Interpretation (.154), Evaluation (.035), and age.

The probability of these relationships occurring by chance is large since:

- P = 0.709 (Description)
- P = 0.454 (Formal Analysis)
- P = 0.561 (Interpretation)
- P = 0.662 (Evaluation)
- P = 0.142 (Total)



### Findings Regarding Socio-economic Status

On the basis of the findings reported in TABLE IV a non-significant correlation of  $-.033$  was found to exist between the total score on the Wilson Aspective Perception Test and children's socio-economic status. Non-significant correlations were found between Description ( $.067$ ), Formal Analysis ( $-.036$ ), Interpretation ( $-.107$ ), Evaluation ( $-.131$ ) and socio-economic status. The probability of these relationships occurring by chance is large since:

$P = 0.411$  (Description)

$P = 0.653$  (Formal Analysis)

$P = 0.184$  (Interpretation)

$P = 0.681$  (Total)

### Discussion

Age. The correlations found in TABLE IV indicate that age is not a useful predictor of the child's ability to perceive qualities and aspects of a work of art in a more aspective manner as measured by the scores on the Wilson Aspective Perception Test. The researcher can only speculate as to why a significant relationship does not exist between age and the total scores on the Wilson Aspective Perception Test.

The Wilson Aspective Perception Test parallels Bloom (1956) and Krathwohl's (1964) Taxonomies of Educational Objectives in that both are hierarchical classifications of expected behaviors arranged from the simple to the complex with respect given to parts of the





art object and the relationship of the parts to the whole.

The sample selected for this study would fall in the range of Piaget's (Lansing, 1969, p. 220) Intuitive Thought Stage, 4 to 7 years of age, and the Concrete Operations Substage, 7 to 11 years of age, of the Concrete Operations Period, of the stages of conceptual development. A child who has arrived at this level demonstrates some ability to coordinate and internalize perceptual transactions. The degree to which perceptual abstraction of parts of objects is coordinated into meaningful wholes would indicate the child's ability to operate at the various levels of the Wilson Aspective Perception Test. Bernstein (1967, pp. 89-102) considers that the attainment of concepts is a developmental sequence. This implies that a number of factors influencing the child in turn affect the rate at which he transcends from the concrete to the abstract and that this transaction is not necessarily a result of increased age. Janes (1970, p. 55), working with young children shown to be homogeneous for age and socio-economic status, found that the children in the study exhibited substantial differences in terms of conceptual style in responding to objects in the environment.

Discussing factors that affect the perceptual-conceptual development of a young child, Lansing (1969, p. 212) claims that the existence of a "set" or state of readiness influences what the child perceives, the speed of perception and the vividness of the perception. From this might be concluded that children develop at different rates because of different influences. Behavioral and motivational



influences affect perceptual-conceptual development because they are an impingement on the child's needs, attitudes, values and past experiences with the environment. The researcher observed that especially at the kindergarten level and at the grade one, grade two and grade four levels, a conditioned kind of verbal responding by a number of children followed the request to "tell all you can" about a painting. These students tended to score high at the Description level of the test. McFee (1961) finds that this tendency to simply identify and label objects often evolves out of a reinforced responding to the "thinglike" quality of the object observed. Thus, the researcher surmises that the child's readiness to attend to a work of art beyond the Description level is analogous to his arrival at the Concrete Operations Period and that this in turn is affected by the way the child has been conditioned to perceive and respond to his environment. This consequence is not necessarily a maturation factor associated with chronological age. This interpretation is consistent with the writings of Bernstein, 1967; Bloom, 1956; Janes, 1970; Lansing, 1969; Salome, 1968.

It is further reiterated that age for the sample in this study does not necessarily mean a specific level of conceptual ability or achievement in school since a particular age level was found at more than one grade level. For example, while some children were completing kindergarten their counterparts were completing grade one. Thus, it would appear that chronological age for this sample is not an indicator of stage of perceptual-conceptual development, nor is it any in-



dication of the child's ability to operate at the various levels of the Wilson Aspective Perception Test.

Socio-economic status. TABLE IV indicates that there is no significant relationship between socio-economic status and the scores on the Wilson Aspective Perception Test. These results appear contrary to the findings of Benscetic (1959) but are consistent with the findings of Lark-Horovitz (1967, p. 159). It must be pointed out that, unlike a number of studies reviewed by Benscetic, the Wilson Aspective Test did not attempt to score children on their preference for particular paintings but on the frequency and quality of their responses to any preferred painting. Bloom (1956, pp. 15-16) sees a difficulty in classifying behaviors because, as he says, two subjects might appear to be responding in a similar manner but in reality are not. One subject could be using a mode of responding anticipated by the subject as the kind of response expected, while another subject could be using reason.

The classroom can be described as a subculture (Lansing, 1969, p. 241) in that it influences the child by providing verbal, auditory, tactile, and other types of stimuli that direct the child's perception and responses in a specific direction. Lark-Horovitz (1967, p. 159) makes the statement that there is a relationship between art appreciation and training but no relationship between socio-economic status and art appreciation. It would appear that if the child's readiness to perceive and respond to form in art or painting is focussed in a particular way in, say, reading-readiness, then





the child will not differentiate between this and other modes of responding when asked to "tell all" about a painting.

The classroom teacher is a vital part of the child's socio-cultural environment and exerts considerable control on the child's mode of perceiving and responding to art since she reinforces those responses that she considers to be important.

Thus, the researcher hypothesizes that under the conditions described for the administration of the Wilson Aspective Perception Test, the classroom teacher and instruction appear to be more influential than socio-economic status in accounting for the quality of a verbal response to a work of art.

## QUESTION 2

Is there a significant relationship between children's verbal responses to paintings, as measured by scores on the Groome Art Appreciation Response Scale and

- (a) age, and
- (b) socio-economic status?

### Findings Regarding Age

As shown in TABLE IV a non-significant correlation of .105 exists between the total scores on the Groome Art Appreciation Response Scale and children's chronological age. Non-significant correlations were found to exist between the Affective level (.066), and the Cognitive level (.101) of the Groome Art Appreciation Response Scale and age. The probability of these relationships occurring by



chance is large since:

P = 0.412 (Affective)

P = 0.211 (Cognitive)

P = 0.191 (Total)

#### Findings Regarding Socio-economic Status

As shown in TABLE IV a non-significant correlation of  $-.075$  exists between the total scores on the Groome Art Appreciation Response Scale and children's socio-economic status. Non-significant correlations also were found to exist between the Affective level ( $-.106$ ), and the Cognitive level ( $-.046$ ) of the Groome Art Appreciation Response Scale and socio-economic status. The probability of these relationships occurring by chance is large since:

P = 0.191 (Affective)

P = 0.569 (Cognitive)

P = 0.352 (Total)

#### Discussion

Age. On the basis of the findings in TABLE IV it appears that there is no significant relationship between chronological age and the scores on the Groome Art Appreciation Response Scale. This correlation would seem to indicate that with an increase in age, the subject is not necessarily able to verbally respond in a more aspective manner to a work of art. Thus, as a child increases in chronological age, one cannot predict an increase in the qualities and aspects he gives attention to in perceiving and talking about a work



of art.

The Groome Art Appreciation Response Scale parallels Bloom (1956) and Krathwohl's (1964) Taxonomies of Educational Objectives which organize the whole of cognitive and affective responding in a logical and hierarchical system arranged from the simple to the complex.

According to Piaget's (Lansing, 1969, p. 220) stages of conceptual development, the children selected for the present study fall in a range from the Intuitive Thought Stage, 4 to 7 years of age, to the Concrete Operations Substage, 7 to 11 years of age, of the Concrete Operations Period. A child operating at the Concrete Operations Period begins to coordinate and internalize perceptual actions made on a concrete object to a degree that depends upon a number of influencing factors. The degree to which perceptual abstraction of parts of objects is coordinated into meaningful wholes and internalized would offer some indication of the child's ability to operate at the various levels of the Affective and Cognitive categories of the Groome Art Appreciation Response Scale. As in Question One this infers that behavioral and motivational factors influencing the developing child consequently affect the rate at which he transcends from the concrete to the abstract. Janes (1970, p. 55) claims that children found to be homogeneous for age and socio-economic status exhibited different conceptual modes of responding to objects in the environment. Lansing (1967) gives equal importance to behavioral and motivational influences that affect perceptual-conceptual development because they both im-





pinge on the child's needs, attitudes, values and past experiences with the environment.

It was observed that even with questions related specifically to affective and cognitive responding on the Groome Art Appreciation Response Scale, a number of children resorted to merely identifying and labelling recognizable components of the paintings. McFee(1961) and Salome (1968) attribute habitual responding to the "thinglike" quality of objects to motivational influences. They see in the classroom a tendency for the teacher to emphasize that which is cognitively certain to the subordination of the affective dimension of responding.

Thus, the researcher speculates that the child's readiness to attend to a work of art at the various levels of the Affective and Cognitive categories, is analogous to his arrival at the Concrete Operations Period and that this consequence, in turn, is affected by the way the child has been conditioned to perceive and respond to objects and events in his environment. It appears that the child's ability to operate at the affective and cognitive levels of the Groome Art Appreciation Response Scale cannot be accounted for by age alone.

Socio-economic status. There is no significant relationship between socio-economic status and the scores on the Groome Art Appreciation Response Scale. The majority of the studies reviewed (Benscetic, 1959; Lark-Horovitz, 1967; Rueschoff & Swartz, 1967; Rump & Southgate, 1967) attempted to score children on their preference for particular paintings, not on the quality and frequency of their responses to any preferred painting.



The classroom teacher is a vital part of the child's socio-cultural environment (Lansing, 1969, p. 241) and exerts considerable control over the child's mode of perceiving and responding to art since she reinforces (Bruner, 1970) those responses that she considers to be important. If the child's readiness to perceive and respond to form is focussed in a particular way, in say, reading-readiness (Salome, 1968), then the child will not differentiate between this and other possible modes of responding while looking at works of art.

As discussed in Question one, the researcher contends that under the conditions described for the administration of the Groome Art Appreciation Response Scale, the classroom teacher and instruction appear to be more influential in determining the quality of a verbal response to a work of art than socio-economic status. This conclusion is confirmed in the writings of Lark-Horovitz, 1967; Lansing, 1969; and Salome, 1968.

### QUESTION 3

Is there a significant relationship between scores on the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale?

#### Findings

The data indicate that there is a significant relationship (.599) between children's verbal responses to paintings, as measured by the total score on the Wilson Aspective Perception Test and chil-



dren's verbal responses to paintings, as measured by the total score on the Groome Art Appreciation Response Scale. The probability of this relationship occurring by chance is very small since  $P < .001$ .

### Discussion

The data in TABLE IV signifies that there is a significant relationship between total scores on the Wilson Aspective Perception Test and the total scores on the Groome Art Appreciation Response Scale. Both tests were concerned with affective and cognitive type responding and the position the response takes in the hierarchy of responding from the simple to the complex. Thus, it may be said that both tests, the Taxonomies of Educational Objectives of Bloom (1956) and Krathwohl (1964) and Feldman's (1967) levels of the Critical Process comprise similar elements. The Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale differ in that each test elicited verbal responses in a distinctive manner. The Wilson Aspective Test simply requested that the subject "tell all" about a preferred painting while the Groome Art Appreciation Response Scale makes use of specific questions about the parts of and the whole painting. The researcher observed that neither type of probing motivated the subject to respond more effectively. The older children were more fluent in the number and variety of responses given to both tests. Younger children gave simple descriptive responses while older children showed more inclination toward alternative ways of responding. It is concluded that the scores on the Wilson Aspective Perception Test are a useful predictor of the ability of children to score





on the Groome Art Appreciation Response Scale and vice-versa.

#### QUESTION 4

Is there a significant difference between males' and females' responses to paintings as measured by scores on the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale?

#### Findings

On the basis of the results reported (See TABLES VIII-XXIII, Appendix I), there are no significant differences between males' and females' responses to paintings as measured by scores on the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale. The probability of these differences occurring by chance is large since:

#### The Wilson Aspective Perception Test

P = .421 (Description)

P = .487 (Formal Analysis)

P = .274 (Interpretation)

P = .810 (Evaluation)

P = .850 (Total)

#### The Groome Art Appreciation Response Scale

P = .738 (Affective)

P = .529 (Cognitive)

P = .500 (Total)

#### Discussion

The Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale did not attempt to measure children's preferences for particular paintings. Both Tests were concerned with the quality and frequency of children's responses to preferred paint-



ings as these responses relate to a hierarchical classification of expected behaviors.

Ilkiw (1968, p. 61), using the Wilson Aspective Perception Test, concluded that Grade seven girls were better able to talk more intelligently about paintings than were the Grade seven boys. Ilkiw's finding is not in agreement with Wilson's (1966, p. 117) report that there is little difference in the way males and females used the categories of the Wilson Aspective Perception Test.

Burt (1948) and Bulley (1934), claims Harris (1966, p. 19), attribute "a change in taste" in the child's early years (10-12 years) to the influence of the environment. Regarding the findings, the researcher speculates that differences in response to paintings between males and females might occur later when male and female role-playing gains importance and determines the kind of verbal responding.

#### QUESTION 5

Are there significant differences between kindergarten, grade one, grade two, and grade four children's responses to paintings as measured by scores on the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale?



## Findings

On the basis of the data reported (See TABLES VIII-XVII, Appendix I), the following is indicated for the Wilson Aspective Perception Test:

At the Description level there is a significant difference between:

Kindergarten and grade four.  $P = .001$

At the Formal Analysis level there is a significant difference between:

Kindergarten and grade four.  $P = .005$

At the Interpretation level there is a significant difference between:

Kindergarten and grade one.  $P = .009$

Kindergarten and grade two.  $P = .053$

Kindergarten and grade four.  $P = .001$

At the Evaluation level there is a significant difference between:

Kindergarten and grade one.  $P = .014$

Kindergarten and grade two.  $P = .002$

Kindergarten and grade four.  $P = .006$

On the total scores of the Wilson Aspective Perception Test there is a significant difference between:

Kindergarten and grade one.  $P = .001$

Kindergarten and grade two.  $P = .002$

Kindergarten and grade four.  $P = .001$





On the basis of the data reported (See TABLES XVIII-XXIII, Appendix I) the following is indicated for the Groome Art Appreciation Response Scale:

At the Affective level there is a significant difference between:

Kindergarten and grade two.  $P = .001$

Kindergarten and grade four.  $P = .001$

At the Cognitive level there is a significant difference between:

Kindergarten and grade one.  $P = .001$

Kindergarten and grade two.  $P = .001$

Kindergarten and grade four.  $P = .001$

Grade one and grade four.  $P = .007$

Grade two and grade four.  $P = .024$

On the total scores of the Groome Art Appreciation Response Scale there is a significant difference between:

Kindergarten and grade one.  $P = .001$

Kindergarten and grade two.  $P = .001$

Kindergarten and grade four.  $P = .001$

Grade one and grade four.  $P = .002$

Grade two and grade four.  $P = .058$

### Discussion

The data indicate that significant differences exist between kindergarten and grade four at all levels of the Wilson Aspective Perception Test. At the Formal Analysis level a significant difference exists between kindergarten and grade four. It was observed that children at the kindergarten level restricted their responses



to identifying and labelling the components of the paintings selected. The grade four students were inclined more to go beyond simple descriptions to a more elaborate kind of exploration of the parts and whole of the painting.

Kindergarten students seldom went beyond the Description level. There is a significant difference between kindergarten children's responses and all other responses in the sample at the Interpretation and Evaluation levels.

With the exception of the kindergarten level the results parallel the findings of Wilson (1966), who, when using the Wilson Aspective Perception Test, found that "when an analysis was made of the language, fifth, seventh, ninth and eleventh grade students used in describing their perception of paintings there were practically no differences among the four groups." One would suspect that the frequent use of the Description level to the exclusion of the others at the kindergarten and early elementary level indicates that the children have not attained the perceptual-conceptual capabilities to cope with the request to respond critically to a painting.

Wilson offers another explanation. He (1966, p. 35) found that children at the elementary level had extensive experience in responding to pictures and visual materials in areas other than art. These materials were provided as referents for their literal components and continued use of these materials in this manner reinforced their "thinglike" quality.

On the Groome Art Appreciation Response Scale children were



asked a series of questions that elicited verbal responses about the whole and parts of paintings of the subject's choice. Questions were such that they elicited both cognitive and affective responses.

Grade two and grade four scored similarly in this study in the affective category of the Test. Little change is evident from one grade to another, but kindergarten differs significantly from grades two and four. The cognitive category of the Test shows a significant difference between the responses of kindergarten and grades one, two and four.

Kingsley and Garry (Salome, 1968, p. 58) speak of the kindergarten child being bred as a vehicle to stock perceptual information. That art education has not accepted any responsibility for the child at the kindergarten level may be attributed to a prevalent feeling among educators (Lowenfeld, 1964) that direct visual training in either the production or appreciation realm of art will interfere with children's creative expression. Salome points out that the young child's perceptual growth is not being left to maturation as some art educators believe. Many of the concepts and skills being taught in other areas directly affect the child's visual experiences and consequently his aesthetic growth in art. Verbal, auditory, visual, tactile and other types of stimuli at the kindergarten and early elementary level directly affect the quality of the child's performance in art.

Lansing (1969, p. 242) speaks of visual clichés being expressed by children who, in the first grade, draw to satisfy the





teacher's request for a drawing. The researcher found a similar situation while administering the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale. Since the request by the researcher provided no provocative stimulation beforehand, children seemed to have anticipated that the request was for a kind of quantitative responding to the "thinglike" quality of the paintings. Lansing (1969), McFee (1961), Salome (1968), and Wilson (1966), account for this mode of language usage by explaining how the entire cultural environment encourages and reinforces "thingness" and quantitative responding in the child's early years. With emphasis on the elaboration of quantitative responding, "man" and "house", qualitative responding, "quiet man" and "old house", does not appear to get the same kind of attention and motivation. Thus, the researcher speculates that the mode of responding to visual materials in areas other than art influences the way children respond to works of art.

#### QUESTION 6

Is there a significant relationship between preferences for particular paintings and:

- (a) sex,
- (b) grade, and
- (c) socio-economic status.



### Findings

The data indicate that there is a significant relationship between children's preferences for particular paintings and sex. The probability of these relationships occurring by chance is very small since  $P = .002$  (See TABLE V).

TABLE V

#### RELATIONSHIP BETWEEN SEX AND CHOICE OF PAINTINGS

SOURCE	PAINTING NUMBER								Total
	1	2	3	4	5	6	7	8	
Sex									
Male	3	11	16	19	20	1	4	6	80
Female	17	6	12	18	15	1	0	6	75
Total	20	17	28	37	35	2	4	12	155

CHI-SQUARE = 16.439

DF = 7

PROBABILITY = .002

On the basis of the results reported (See TABLE VI), there is a significant relationship between children's preferences for particular paintings and grade. The probability of these relationships occurring by chance is very small since  $P = .007$ .



TABLE VI  
RELATIONSHIP BETWEEN GRADE AND CHOICE OF PAINTINGS

SOURCE	PAINTING NUMBER								Total
	1	2	3	4	5	6	7	8	
Grade									
K	4	6	20	18	10	1	1	2	62
1	4	1	4	5	11	0	1	3	29
2	5	3	2	7	9	0	0	6	32
4	7	7	2	7	5	1	2	1	32
Total	20	17	28	37	35	2	4	12	155

CHI-SQUARE = 40.361

DF = 21

PROBABILITY = .007

The data indicate (See TABLE VII) that there is a significant relationship between children's preferences for particular paintings and socio-economic status. The probability of these relationships occurring by chance is very small since  $P = .007$ .





TABLE VII  
RELATIONSHIP BETWEEN SOCIO-ECONOMIC STATUS AND  
CHOICE OF PAINTINGS

SOURCE	PAINTING NUMBER								Total
	1	2	3	4	5	6	7	8	
Socio-Economic Status									
Low	11	14	17	15	22	2	0	10	91
High	9	3	11	22	13	0	4	2	64
Total	20	17	28	37	35	2	4	12	155

CHI-SQUARE = 19.463      DF = 7      PROBABILITY = .007

### Discussion

The data indicates (TABLES V - VII) that to a certain extent it is possible to predict the preferences of males and females for particular paintings. Generally, those paintings selected as being the preferred paintings of males and females were highly representational and realistic. In two cases (Matisse and Van Gogh) the paintings were colorful and childlike in their execution.

Matisse's still-life of goldfish appears to be the one painting upon which both males' and females' preferences agreed. It was the second favoured painting of the boys (19) and the first choice of the girls (18). This can perhaps be accounted for by the childlike quality of the painting (Benscetic, 1959). The subject matter



is easily identifiable and associated with what gives children pleasure. This finding is confirmed by Rump & Southgate (1967); Lark-Horovitz (1967); and Rueschoff & Swartz (1967), who found that young children like brightly colored pictures of subject matter with which they can associate.

Renoir's painting of two young girls commanded the attention of the second largest group of females in the study, and only three males. The children who selected this painting seemed most interested in the subject matter. It is interesting to note that the greatest number of boys selected the highly representational painting of "The Sleeping Gypsy" by Rousseau. Fifteen girls selected this painting also, despite the fact that a number of art educators would suggest that the subject matter is uninteresting for girls (Rueschoff & Swartz, 1967). This finding agrees with the observations of Ilkiw (1968) and Minuchin (1966), who found girls more imaginative and open-minded. Rousseau's painting is highly representational and fantasy-like in quality. Levenson's (Benscetic, 1959) study found that children in general liked story telling pictures.

There is a significant relationship between the children's painting preferences and their grade level. It is indicated (See TABLE VI) that children in kindergarten and the lower elementary grades prefer representational and realistic paintings as compared to highly abstract and non-objective type paintings. This complies with McFee's (1961, p. 46) observation that people tend to identify things by their function rather than their visual qualities. But it



is interesting to note that at the kindergarten level the paintings most highly favoured (Van Gogh; Matisse) exhibit childlike qualities that incline more towards the abstract than other paintings in the instrument with identifiable and representational content. Grades one, two and four children preferred representational paintings and the majority selected "The Sleeping Gypsy" by Rousseau, the quality of which is more photographic than the quality of the paintings of Van Gogh and Matisse. There was a noticeable decrease in the number of children choosing the paintings of Van Gogh and Matisse at the grades one, two and four level.

The majority of the subjects in both the high socio-economic status group and the low socio-economic status group selected the Van Gogh, Matisse and Rousseau paintings as their preferred paintings. These paintings are representational and their subject matter, it was indicated, interests children (Rump & Southgate, 1967). The low socio-economic status group selected abstract and non-objective paintings twelve times while the high socio-economic status group selected abstract and non-objective paintings only six times.

Burt (Harris, 1966, p. 22) claims that the preference of children in the low socio-economic status group for non-objective and abstract paintings is to be attributed to "instinctive taste", unaffected by imposed social standards. That the children in the high socio-economic status group chose abstract and non-objective paintings only half as many times as the low socio-economic status group may be attributed to social influences stressing strong prefer-





ence for what is clear representationally (Harris, 1966, p. 22). It is postulated that the children in the high socio-economic status group would be exposed to more of the controversies on the validity of "modern art" than on representational and realistic art.

Of the total population that selected the Degas' painting of horses, 82.4% were from the low socio-economic status group. Only 17.6% of the children of the high socio-economic status group chose the Degas. The researcher accepts Berry's (Rump & Southgate, 1967) observation that children in general like pictures of horses. Two factors may have affected the results discussed here: (a) Perhaps children from the low socio-economic status group in the present sample have not had exposure to or experiences with horses as may have children from a high socio-economic status group. Children seem particularly stimulated by that which they are deprived of in their environment (Lark-Horovitz, 1967, p. 156); (b) The Degas painting tends to abstract and distort horses. The data in the present study indicate that children in the low socio-economic status group revealed more of a willingness to accept that which was not exactly realistic and representational.



## CHAPTER V

### SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

#### FOR FURTHER RESEARCH

#### SUMMARY OF THE STUDY

##### The Problem

The purpose of this exploratory study was to examine the verbal responses of kindergarten and elementary school age children in grades one, two and four as they attended to reproductions of paintings.

The study was undertaken to provide descriptive data pertaining to the following:

1. children's perception and understanding of the range of qualities and characteristics found in paintings;
2. children's concepts about paintings as these are categorized according to the four processes of art criticism; description, formal analysis, interpretation, and evaluation;
3. children's responses to paintings as these may be categorized as being cognitive or affective; and
4. children's preferences for particular paintings.

##### Procedures

The sample consisted of 62 kindergarten age children, 29 grade one students, 32 grade two students and 32 grade four students. All students were from the Edmonton Public School Board, Edmonton, Alberta, Canada, except for 28 kindergarten students from the kinder-



garten at the University of Alberta. The total sample of 155 children was selected with specific consideration for sex, age, grade and socio-economic status.

Each subject in the total sample was individually administered the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale by the researcher during the period May 1 to May 15, 1970.

Eight painting reproductions selected for the purpose of eliciting responses with the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale were randomly ordered in a room allocated for testing at each school. For the Wilson Aspective Perception Test, the subject was asked to select a painting and to "tell all" he could about the painting. For the Groome Art Appreciation Response Scale, the subject answered specific questions about a painting of his choice. The verbal responses of each individual to the tests were recorded on a Sony cassette type tape recorder. For scoring purposes, responses were transcribed from the sound tapes to a scoring booklet prepared for each subject in the study. The computer at the University of Alberta was used to process data for analysis and interpretation. The results were interpreted and reported within the context of the study specifically and art education in general.

### Major Findings

The following represent the major findings in answer to the six questions raised:





1. Chronological age for the sample in the present study is not a useful indicator of the child's ability to operate at the various levels of the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale.
2. Under the conditions described for the administration of the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale, socio-economic status does not appear to be a useful indicator of the child's ability to operate at the various levels of both Tests.
3. The scores on the Wilson Aspective Perception Test are a useful predictor of children's ability to score on the Groome Art Appreciation Response Scale and vice versa. That is, there was a significant correlation (.599) between the total scores on the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale.
4. Knowledge of the sex of the children in the sample does not offer any significant indication of their ability to respond to paintings as measured by the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale.
5. There was a significant difference in scores of the verbal responses between kindergarten and grade four students at all levels of the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale. The



highest scores for the sample were attained at the Description level of the Wilson Aspective Perception Test and in the Cognitive category of the Groome Art Appreciation Response Scale. The majority of the children in the total sample responded primarily by identifying and labelling components of paintings in a more quantitative rather than a qualitative manner.

Kindergarten children responded less frequently beyond the Description level than the children of grades one, two and four. The kindergarten children made no significant use of the Formal Analysis level of the Wilson Aspective Perception Test. The majority of these children preferred the "Artist's Bedroom at Arles" by Van Gogh and "Still Life with Goldfish" by Matisse. Both paintings exhibit commonplace objects (chairs, tables, flowers, dishes) painted in a childlike manner. The kindergarten children simply labelled the identifiable components of the paintings they selected. Seldom was there any attempt to interpret or narrate the aspects and qualities of the paintings.

There were no significant differences among scores of the responses of grade one, two and four children at the Description, Formal Analysis, Interpretation or Evaluation levels of the Wilson Aspective Perception Test. The children of grades one, two and four responded more by inter-



preting and evaluating the paintings of their choice than did the children of kindergarten who made descriptive responses.

Kindergarten and grade one children did not score as frequently in the Affective category of the Groome Art Appreciation Response Scale as did grade two and grade four children in the sample.

6. A significant relationship was found to exist between children's preferences for particular paintings and the variables of sex, grade, and socio-economic status. Although both males and females selected representational and realistic paintings, males associated more with representational and realistic paintings that had subject matter considered to be of interest to males. Females selected representational and realistic paintings but appeared to be more "open-minded" in their subject matter preferences. For instance, the painting "The Two Sisters" by Renoir, selected most frequently by females (17 times), showed two young girls in pink and white dresses sitting near flowers and trees. Out of the entire sample (155), only three males selected this painting. The painting "The Sleeping Gypsy", by Rousseau, selected most frequently by males (20 times), depicted a lion coming close to a sleeping man. Out of the entire sample only 15 females chose this painting.





Children at the kindergarten level favoured paintings with childlike qualities that inclined more toward the abstract than the other more representational paintings in the study.

Generally, both the low socio-economic status group and the high socio-economic status group preferred representational and realistic paintings. However, within the minority of students who chose abstract and non-objective paintings, more were from the low socio-economic status than from the high socio-economic status groupings.

The low socio-economic status group selected (10 times) the painting "Au Claire de la Lune" by Pellán, which is abstract and somewhat childlike in its execution of imagery. In this painting the form is reduced to simple but colorful elements in composition. The high socio-economic status group selected much less frequently (only twice) this painting by Pellán.

#### Some Limitations of the Study

The study was restricted to the consideration of only that part of the transaction between the perceiver and the perceived (the painting reproduction) which was communicated to the researcher verbally.

The researcher observed that children frequently communicated their reactions to a painting through body gestures and facial expressions such that a system of recording and scoring the non-verbal re-



sponses to paintings might provide further insight into the quality of the transaction between the child and the painting.

A number of good quality original paintings rather than reproductions might facilitate a more meaningful response by young children to the tactile quality of a painting because at the kindergarten and early elementary grade level children impulsively seek out more information about objects through kinesthetic and tactile exploration. The tactile sensation of the plastic-coated surfaces of the painting reproductions frequently interfered with children's perceptual responses to the simulated textures exhibited in paintings.

There appear to be no isolated socio-economic areas in the immediate geographical location where the study was conducted that could be classified as exclusively high socio-economic status or low socio-economic status. It was difficult, therefore, to determine the extent of the influence of socio-economic status on the verbal responses of kindergarten and early elementary grade children to paintings.

A homogeneous mode of responding particularly at the kindergarten level suggests that a pervasive influence over the quality of the transaction between the child and the painting may exist well within the school setting. The administration of the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale within the school setting may have limited the children's individual and personal modes of expression.

### Conclusions

As compared to the simple request to "tell all" on the Wilson



Aspective Perception Test, the detailed questions of the Groome Art Appreciation Response Scale did not, seemingly, motivate children to express more openly or explicitly their personal opinions and feelings about the paintings they selected. Conversely, questions on the Groome Art Appreciation Response Scale concerning line and shape functioned as a probing device, since, when questioned specifically about these aspects, children in the majority of cases at least indicated their presence or absence in the paintings. For both tests generally, children seem to have established a mode of responding to the more obvious aspects (color and literal meaning) of a painting. Unless probed for what seemed to be the more subtle aspects of the paintings (line, shape), children did not readily offer this information. The investigator observed that the request to "tell all" on the Wilson Aspective Perception Test was usually considered as a challenge to take stock by identifying and labelling the many literal and color aspects of the paintings.

At the Description level of the Wilson Aspective Perception Test, subjects made most frequent use of the Literal Meaning category. To score in this category a subject simply had to name identifiable aspects of the paintings selected (such as dog, horse). The other category frequently used at the Description level was the category of color. Usually children scored in this category by labelling all the colors they could identify in the paintings. While grade one, two and four children made limited use of other categories at the Description level, kindergarten children used almost exclusively the Literal





Meaning category and the Color category of the Description level. Next to Literal Meaning, the Color and then the Shape category received more attention from the children in the sample than any other aspects. This is perhaps accounted for by the emphasis on identifying names of primary colors and simple geometric shapes in kindergarten and the early grades. When children were asked to find a shape they habitually sought out circles, squares and triangles rather than organic structures.

In considering the total sample, at the Description level little or no use was made of the categories Media, Technique, Naming Artist, Naming Work and Context which gives some indication of the limited exposure at the kindergarten and early elementary grades to looking at and talking about works of art.

The children of grade one, two and four made more frequent use of the Formal Analysis level of the Wilson Aspective Perception Test than the kindergarten children. Scoring at the Formal Analysis level necessitated that the child abstract a third quality from the painting by giving attention to two perceived qualities. Kindergarten children from this sample are seemingly not yet able to imagine and organize relationships between two aspects perceived in a painting. Children in grades one, two and four made minimal use of this level of responding. There was no significant difference between the grades although it was hypothesized that by grade four a majority of the children should be able to perform at the Formal Analysis level. The children who scored at the Formal Analysis level usually did so with simple



comparisons of color or shape.

In guiding the child through experiences aimed at discovery, emphasis in the home and at school would seem to be placed on quantitative responding through identifying and labelling aspects (dog, horse, red, brown) rather than qualitative responding that reinforces personal contemplation and expression (lazy horse, red chair, brown dog). The researcher hypothesized that this limited mode of discovery would have direct bearing on scores at the Formal Analysis and the Interpretation level as well as at the Description level since an accent on quantitative responding minimizes the importance of time for personal contemplation and expression.

It was anticipated that children could make use of the Interpretation level of the Wilson Aspective Perception Test by storytelling, imagining or reminiscing, since the observations of Lowenfeld (1964, p. 425) and Rueschoff and Swartz (1967, p. 53) disclose that young children like to tell stories about their art work. At the Interpretation level the Literal Meaning category was the one most frequently used. To score in the Literal Meaning category, children had to go beyond identifying and labelling (lion) to relate some activity ("The lion is looking") the aspects carry out in the painting. Only at the grade one, two, and four level, and specifically at the grade four level, did the children deviate from identifying and labelling aspects in order to express more personal interpretations. This is further indicated by the minimal use of those categories other than the Literal Meaning category at the Interpretation level. For in-



stance, little use was made of the Modal Aspect category by the kindergarten children. An individual would have to synthesize the aspects of the painting into a total feeling for it as a whole ("The flowers make me feel happy"). The Anecdote Poetry category at the Interpretation level was used less frequently than the Literal Meaning category, and mainly by the grade one, two and four children. To score in the Anecdote Poetry category the subject would have to tell a story or recite poetry about the things he sees ("The lion is near the man. He is going to eat the man.").

It was not essential that the child have had any previous experience in looking at works of art in order to score in any of the three categories, Literal Meaning, Modal Aspects, or Anecdote Poetry of the Interpretation level. While the Literal Meaning Category considered only that which was cognitively certain (such as: dogs walk), scores could have been attained in the Modal Aspect and the Anecdote Poetry categories for responses that ranged from the unusual ("The fish are going to die") to the very personal ("It makes me happy").

As indicated by both Tests, identifying and labelling objects for their literal and "thinglike" quality begins early in childhood and appears to persist and be reinforced later on in the school. This depersonalized approach to learning seems to minimize the importance of an interrelationship of cognitive and affective behaviors in the process of describing, analyzing, interpreting and judging as was revealed by the data resulting from this study. Jane's study (McWhinnie, 1970, p. 36) of the conceptual modes of children in responding to





works of art suggests that an apparent emphasis on developing cognitive behavior relates to the quality of verbal responding used in talking about works of art.

Generally, both males and females in the sample preferred a representational and realistic style of painting. At the kindergarten level two paintings (the Van Gogh: the Matisse) which were selected more than any others, appear childlike in execution and tend to be more so than the remaining paintings in the study.

The low socio-economic status group with a wider range of style preferences selected abstract paintings more frequently (12 times) than the high socio-economic status group. They favoured highly abstract paintings by Riopelle ("Du Noir qui se Leve") and Pellán ("Au Claire de la Lune") which did not get the same attention from the high socio-economic status group (2 times). The researcher surmised that the wider range of interest shown by the low socio-economic status group is accounted for by a curiosity for the new and the unusual. Children from the low socio-economic status group may not have had the same familiarity with modern art forms as the children in the high socio-economic status group.

Results of data of painting preferences indicate a relationship between sex and the preferences given. The majority of the male subjects gave their attention to aspects (lion, fish, man, boats) described in previous studies (Benscetic, 1959; Lark-Horovitz, 1967; Rueschoff and Swartz, 1967) as those that would interest male children. While the females showed interest in a wider range of aspects of paintings



(girls, flowers, fish, dresses) they generally limited their attention to those aspects said to interest female children. This distinction in taste between the male and female subjects was not overtly revealed in the quality of the verbal responses given in relation to the same paintings. Since the subjects were generally reluctant to go beyond simply identifying and labelling aspects with which they were familiar, distinctly male or female reactions were difficult to detect in the verbal responses given. The researcher speculates that differences in response to paintings between males and females might occur later when male and female role-playing is more prevalent in the quality of verbal responses (Lowenfeld, 1964, pp. 232-236).

#### IMPLICATIONS OF THE STUDY FOR ART EDUCATION

For the present study instruction and the classroom environment as indicated by the variable of grade appear to influence the quality of a child's response to a painting more so than the variables of age, sex and socio-economic status for the present sample limited to kindergarten, Grade one, Grade two and Grade four level. While it is assumed that the school environment and the home environment are influential factors, the unique position of each in determining the quality of a child's response to an art object can only be ascertained by further research.

Children across the sample in the present study relied heavily on a cognitive type of responding that gave emphasis to the literal



aspects of the paintings discussed. This cognitive behavior, oriented towards responding to the "thing-like" quality of the objects, appears not to have adequately acknowledged the affective behavioral dimension involved in responding to works of art. Salome (1968, p. 58) and Wilson (1966, p. 33) consider that the variations in learning experiences in the child's early education place little emphasis on extending the child's capacity for handling visual information other than by providing simple exercises in naming and labelling. McFee (Salome, 1968, p. 58) and Janes (1970, p. 52) posit that art programs should provide a form of visual training for children as early as kindergarten.

The findings in the study would seem to imply that if educators find it desirable for individuals to develop a basis for discriminating among objects in art and in matters concerning their environment, then curriculum content and methods of instruction other than those primarily emphasizing studio art activities need to be developed. With a structured curriculum that gives importance to the organization of a terminology that can be used appropriately and meaningfully at each level of the critical process it is conceivable that young children as early as kindergarten could develop a sense of awareness and discrimination while maintaining an individual and personal involvement with art objects and their environment. While kindergarten children do not appear to have a capacity for the wider range of responding which was experienced by the grade four level, they are interested in and show a preference for a broad range of styles of paintings.

Paintings obtained for study at the kindergarten and early





elementary grade level should be selected with consideration for that which interests children. Rueschoff and Swartz (1967, p. 75) recommend subject matter in which children have shown an interest through their own art work. Children ought to be encouraged to participate in the selection of paintings for study.

Conversations about works of art ranging from the cognitively certain with its appropriate terminology to the cognitively less certain with an emphasis on affective behavior could prove to be instrumental in assisting children to resolve and express their own ideas and feelings. This means that in structuring learning experiences for children using works of art, affective behavior that permits children to contemplate and express personal and individual ideas needs to be given its place of importance as an integral part of responding critically to art. Intuition, pleasure, fantasy, empathy, contemplation, impression and imitation are as meaningful to art as those experiences that facilitate cognitive behavior by identification and classification at the kindergarten and early elementary grade level.

In conclusion, it is essential to acknowledge art at the kindergarten and early elementary grade level as constituting both art appreciation and art production experiences directed towards educational objectives that respect the mode of conceptualization normal for children in the early stages of development.

#### RECOMMENDATIONS FOR FURTHER RESEARCH

The following suggestions are made concerning future studies



of kindergarten and early elementary school age children and their capacity to transact with works of art:

1. Using the same procedures a similar study with groups of children from more isolated and disadvantaged areas might provide insight into the relationship between socio-economic status and the ability of children to respond to works of art.
2. Original art forms rather than reproductions might provide more comprehensive meaning to younger children using the Wilson Aspective Perception Test and the Groome Art Appreciation Response Scale since some aspects and qualities of works of art appear to be lost in the reproduced form.
3. A further study might be extended to include an exemplary art program designed specifically to alter the awareness of kindergarten and elementary age children to works of art. This might be undertaken with the development of a terminology appropriate to this level and with an emphasis on affective and cognitive behavior at the four critical process levels.
4. Visual media in and outside the classroom environment may influence the ways in which children tend to respond to works of art. Television and visual aids are two important media that need to be studied for possible relationships with children's responses to works of art.



5. The present study indicates that children at the kindergarten level did not make use of the Formal Analysis level of the revised Wilson Aspective Perception Test. A further study designed specifically to test children's readiness to analyze aspects and qualities of a work of art at the kindergarten and early elementary grade level would be helpful in establishing a basis for art curriculum preparation.
6. It is suggested that the present study be replicated in an atmosphere outside the public school system in order to compare the classroom setting with other situations to ascertain the quality of children's responses to works of art. The Edmonton Art Gallery is suggested as an appropriate setting outside the school system.



## REFERENCES

- Alberta Elementary Art Curriculum Guide. Department of Education, Edmonton, Alberta, 1969.
- Anderson, W. H. Art Learning Situations for Elementary Education. Belmont, California: Wadsworth Publishing Co., 1965.
- Benscetic, S. T. Picture Preferences of Elementary Children. Doctoral dissertation, Pennsylvania State University, University Microfilms, 1959.
- Bernstein, B. Social Structure, Language, and Learning. In John P. De Cecco (Ed.), The Psychology of Language, Thought and Instruction. New York: Holt, Rinehart and Winston, Inc., 1967, 89-102.
- Bingham, M. Art Education: The Learning Process and the Search for Structure, Studies in Art Education, N.A.E.A., Winter, 1968, 9 (13), 13-20.
- Blishen, B. R. et al., Canadian Society: Sociological Perspectives. Toronto: Macmillan Company of Canada, 1961.
- Bloom, B. S. Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain. New York: David McKay, Inc., 1965.
- Brittain, W. L. Some Exploratory Studies of the Art of Preschool Children, Studies in Art Education, N.A.E.A., Spring, 1969, 10, (3), 14-24.
- Bruner, J. S. The Act of Discovery. In G. Pappas (Ed.), Concepts in Art Education, The MacMillan Company, Collier-McMillan Limited, London, 1970.
- Bulley, M. Aesthetic Judgments of Children. The British Journal of Psychology, Vol. 3-4, 1934, 168-182.
- Central Midwestern Regional Educational Laboratory, Inc. Aesthetic Education Curriculum Program. St. Ann, Missouri, 1969.
- Child, Irvin L. Development of Sensitivity to Aesthetic Values. Co-operative Research Project No. 1748, Yale University, New Haven, Connecticut, 1964.





- Church, Joseph. Language and the Discovery of Reality, Vintage Books, A Division of Random House, New York, 1961.
- Ecker, D. Teaching Machines and Aesthetic Values. Studies in Art Education, N.A.E.A., Spring, 1962, 3, 8-15.
- Eisner, E. W. Curriculum Making for the Wee Folk: Stanford University's Kettering Project. Studies in Art Education, N.A.E.A., Spring, 1968, 9 (3), 45-56.
- Eisner, E. W. The Qualitative Aspects of Children's Cognitive Development. University of Chicago. Presented as an address at the National Art Education Association Convention meeting in Philadelphia, Pennsylvania, 1965.
- Feldman, E. B. Art as Image and Idea. New Jersey: Prentice-Hall, Inc., 1967.
- Freeberg, N. E. & Payne, D. T. Parental Influence on Cognitive Development in Early Childhood: A Review. In Joe L. Frost (Ed.), Early Childhood Education Rediscovered. Readings.
- Groome, L. J. Increasing Art Appreciation Using a Teaching Structure Based on Feeling and Form. Unpublished doctoral dissertation, Illinois State University, 1969.
- Grossman, M., Art Education for the Young Child. Review of Educational Research. June, 1970, 40 (31), 421-426.
- Harris, D. B. Aesthetic Awareness: A Psychologist's View. Studies in Art Education, N.A.E.A., Spring, 1966, 19, (5), 17-23.
- Harris, D. B. Children's Drawings as Measures of Intellectual Maturity. Harcourt, Brace & World, Inc., New York, 1963.
- Ilkiw, W. Concepts of Art Criticism at the Seventh Grade. Unpublished Master's Thesis, University of Alberta, 1968.
- Inhelder, B. & Piaget, P. The Early Growth of Logic in the Child. Routledge & Kegan Paul, London, 1964.
- Janes, H. E. Conceptual Modes of Children in Responding to Art Objects. Studies in Art Education, N.A.E.A., Spring, 1970, 11 (3), 52-57.
- Kellogg, R. Analyzing Children's Art. National Press Books. Palo Alto, California, 1969.



- Knee, S. M. Art Appreciation for the Fifth and Sixth Grades. A Design for a Program in Art Appreciation for Teachers of the Fifth and Sixth Grades. Doctoral dissertation, New York University, University Microfilms, 1961.
- Krathwohl, D. R., and others. The Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook II: Affective Domain. New York: David McKay Company, Inc., 1964.
- Lanier, V. Talking about Art: An Experimental Course in High School Art Appreciation. Studies in Art Education. N.A.E.A. Spring, 1968, 9 (3), 32-43.
- Lansing, K. M. The Research of Jean Piaget and Its Implications for Art Education in the Elementary School. Studies in Art Education. N.A.E.A., 1966, 7 (2), 33-42.
- Lansing, K. M. Art, Artists, and Art Education. McGraw-Hill Book Company, Toronto, 1969.
- Lark-Horovitz, B., Lewis, H., & Luca, M. Understanding Children's Art For Better Teaching. Ohio: Charles E. Merrill Books, Inc., 1967.
- Lombard, J. B. Individualized Instruction in Art Education. What's New? In Allen Neufeld, (Ed.), Individualized Curriculum and Instruction Proceedings, Third Invitational Conference on Elementary Education. Department of Elementary Education, University of Alberta, 1969, 170-184.
- Lowenfeld, V. Creative and Mental Growth. New York: MacMillan, 1964.
- McFee, J. K. Implications for Change in Art Education. In E. Eisner and D. Ecker (Eds.), Readings in Art Education. Blaisdell Publishing Co., Toronto, 1966.
- McFee, J. K. Preparation for Art. Wadsworth Publishing Co., Inc., San Francisco, 1961.
- McFetridge, P. A. The Uses and Nature of Language. Elements, Department of Elementary Education, University of Alberta, 2 (1), 1969.
- Minuchin, P. P. Sex differences in Children: Research Findings in an Educational Context. National Elementary Principal, XLVI, 1966, 46.
- Munro, T. Art Education, Its Philosophy and Psychology. The Liberal Arts Press, New York, 1956.



- Newman, T. Are We Still With It? Art Education. N.A.E.A., 1970, 23 (4), 14-18.
- Pappas, G. (Ed.) Concepts in Art and Education. The MacMillan Company: Collier-MacMillan Limited, London, 1970.
- Pepper, S. C. Autobiography of an Aesthetic. The Journal of Aesthetics and Art Criticism. Vol. XXVIII (3), Spring, 1970, 275-285.
- Philips, J. L. The Origins of Intellect: Piaget's Theory. W. H. Freeman & Company, San Francisco, 1969.
- Piaget, J. Child's Conception of the World. 1963, Littlefield, Adams, & Company, Paterson, New Jersey.
- Rueschoff, H. P. & Swartz, M. Teaching Art In the Elementary School. New York: The Ronald Press Company, 1969.
- Rump, E. E. & Southgate, V. Variables Affecting Aesthetic Appreciation in Relation to Age. British Journal of Educational Psychology. Vol. XXX (7), 1967, 58-71.
- Robinson, H., & Spodek, B. Early Childhood Education Series. Teachers College Press, Teachers College, Columbia University, New York, 1965.
- Salome, R. Perceptual Training in Reading Readiness and Implications for Art Education. Studies in Art Education. 1968, 10 (1), 58-65.
- Schermann, A. Cognitive Goals in the Nursery School. In Joe L. Frost (Ed.), Early Childhood Education Rediscovered. Readings. Holt, Rinehart and Winston, Inc., Toronto, 1968.
- Schwartz, B. The Child's Expanding Visual World: Challenge to Art Appreciation in the Elementary School. Elements. Department of Elementary Education, The University of Alberta, 1 (1), 1969.
- Smith, R. A. Aesthetic Criticism: The Method of Aesthetic Education. In George Pappas (Ed.), Concepts in Art and Education. The Macmillan Company, Collier, Macmillan Limited, London, 1970.
- Stewart, W. R. The Interaction of Certain Variables in the Apperception of Paintings. Doctoral dissertation, Pennsylvania State University, University Microfilms, 1961.





- Stones, E. Verbal Labelling and Concept Formation in Primary School Children. The British Journal of Educational Psychology, 1970, 40 (3), 245-252.
- Vygotsky, L. S. Thought and Language. The M.I.T. Press, Massachusetts Institute of Technology, Cambridge, Massachusetts, 1962.
- Wilson, B. G. An Experimental Study Designed to Alter Fifth and Sixth Grade Students Perception of Paintings. Studies in Art Education. N.A.E.A., 1966, 8 (1), 33-42.
- Wilson, B. G. The Development and Testing of an Instrument to Measure Aspective Perception of Paintings. Doctoral dissertation, The Ohio State University, University Microfilms, 1966.



## APPENDIX A



## PERSONAL DATA SHEET

Number \_\_\_\_\_

SCHOOL \_\_\_\_\_ GRADE \_\_\_\_\_ TEACHER \_\_\_\_\_  
NAME \_\_\_\_\_ AGE \_\_\_\_\_ SEX \_\_\_\_\_ S.E.S. \_\_\_\_\_

---

Mark first (1) and second (2) choice.

---

Renoir, Auguste: "The Two Sisters"

---

Degas: "Race Horses"

---

Van Gogh, Vincent: "The Artist's Bedroom at Arles"

---

Matisse, Henri: "Still Life with Goldfish"

---

Rousseau, Theodore: "The Sleeping Gypsy"

---

Riopelle, J. P.: "Du Noir Qui se Leve"

---

Feininger: "The Blue Coast"

---

Pellán: "Au Claire de la Lune"

---



## APPENDIX B





## PAINTING REPRODUCTIONS USED IN THE STUDY

---

---

	Artist	Title
1.	Renoir	"The Two Sisters"
2.	Degas	"Race Horses"
3.	Van Gogh	"The Artist's Bedroom at Arles"
4.	Matisse	"Still Life with Goldfish"
5.	Rousseau	"The Sleeping Gypsy"
6.	Riopelle	"Du Noir qui se Leve"
7.	Feininger	"The Blue Coast"
8.	Pellan	"Au Claire de la Lune"

---



## APPENDIX C



ADMINISTRATION OF THE WILSON ASPECTIVE  
PERCEPTION TEST AND THE GROOME ART  
APPRECIATION RESPONSE SCALE

The Wilson Aspective Perception Test

I'm interested in finding out what children think about paintings. Pick one painting and I'd like you to tell me all you can about that painting.

The Groome Art Appreciation Response Scale

Pick another painting. This time I'm going to ask you some questions about the painting.

1. Tell me the first thing you think or feel when you look at this painting.
2. Tell me about the  
colour  
shapes  
lines
3. How does the artist's use of ..... make you feel?  
colour  
shapes  
lines
4. What stands out in the painting? How does the artist make it stand out?
5. Is there something in the painting that you can see more than one of?..... Show me.
6. Is this a good painting? Why.





## APPENDIX D



SCORING PROCEDURE FOR THE WILSON  
ASPECTIVE PERCEPTION TEST

Each subject's response to the painting reproduction of his choice was introduced on the tape recorder by means of an identification number. The entire response was later transcribed in an information booklet compiled for each subject in the study. For the sake of clarity and consistency the response of each individual was read and reread before subjecting it to analysis for the purpose of giving it a point score.

The Wilson Aspective Test deals with two major types of categories, (See Table II) classified as: Individual Response Mode Categories and Aspects of Art Works Categories. The categories of these two major types of categories were organized and distributed by Ilkiw (1968) in order that they parallel the hierarchy of the four Critical Process Levels. (See Table III)

In order to score individual categories of the Individual Response Mode Categories, it was deemed sufficient only to note their presence or absence in a response. Location and Direction at the Description level; Shape, colour, Line, Texture, Media and Technique at the Formal Analysis Level; Anecdote Poetry, Affective Description and Literal Meaning at the Interpretation Level; and Affective and Evaluation at the Evaluation Level were scored in this manner. Each instance of the presence of Relational Analysis and Synthesis was noted because it was considered important to give "a more accurate indication of the individual pattern of



responding to works of art" (Wilson, 1966).

In scoring the Aspects of Art Works Categories it was deemed necessary to indicate both what it is the subject directs his attention toward in the painting reproduction, and the relative importance of the category in relation to the other categories used in the response. Scores for the Aspects of Art Works Categories ranged on a four point scale from 0 to 3. A score of 0 points was given where the category was not used. A score of 1 point was given where the category was used, but only in a secondary manner as an elaboration or qualification of some other category. For example, in the response "a green square," "green" is considered secondary since it describes "square." A score of 2 points was given where the category was used as a primary in the response to the painting reproduction, but where there is at least one other primary category present. For example, in the response, "greens and squares," both "greens" and "squares" are considered primary. Three points were given where the category was primary to the response, but other categories in the response were used as elaboration or qualification or not used at all; for example, in "a green square," "square" is considered primary.

Frequency is not a factor in scoring categories related to Aspects of Art works Categories. Whether a category of the Aspects of Art Works Categories was mentioned once or many times in a response, the category received the same score.



The categories: Shape, Colour, Line, Texture, Media, Technique, Literal Meaning, Naming Artist, Naming Style at the Description Level; Conventional Meaning and Inferred Meaning at the Interpretation Level were scored without regard for other categories.

The following categories did not have a point rating of 1, since they would not be used as an elaboration or qualification of some other category:

Naming work,	0, 2 or 3 points;
Context,	0, 2 or 3 points;
Formal Aspect,	2 or 3 points; and
Modal Aspect,	2 or 3 points.

The category titled Not Classified designated any response which could not be classified in any other category but which merited a point score of 0 or 1.

Appendix F illustrates the manner in which some of the responses were scored. Following the scoring of the responses of each subject in the Wilson Aspective Perception Test a total score in points was recorded on a Master Tabulation sheet.





## APPENDIX E



SCORING PROCEDURE FOR THE GROOME ART  
APPRECIATION RESPONSE SCALE

The scoring guide (See Appendix H) as devised by Groome was used by the researcher in evaluating responses on the Art Appreciation Response Scale. The scoring guide consisted of two scales, a cognitive one and an affective one, paralleling the taxonomies of educational objectives as defined by Bloom (1965) and Krathwohl (1964). For scoring purposes there was a hierarchy of three levels established for the affective domain. Each level comprised three subdivisions classed low, medium, and high. The nine levels were each given a point value ranging from one to nine points.

The cognitive domain showed a hierarchy of four levels and each level comprised three subdivisions classed low, medium and high. The twelve levels were each given a point value ranging from one to twelve points.

Each subject was asked to select from a group of eight painting reproductions one of his choice. Responses to the questions on the Groome Art Appreciation Response Scale were recorded on a cassette type tape recorder. The response was later transcribed in a scoring booklet prepared for each subject. For the purpose of scoring the Art Appreciation Response Scale a response was sorted into cognitive and affective areas and given a value on the recording sheet. Considerable practice was undertaken by the researcher who scored the responses received in a pilot study conducted at the Saturday morning art classes, Department of Elementary Education,



University of Alberta.





## APPENDIX F



EXAMPLES OF SCORING OF STUDENTS' RESPONSES  
ON THE WILSON ASPECTIVE PERCEPTION TEST

Kindergarten, female

Rousseau: "The Sleeping Gypsy"

There is a lion in the picture

There is a man in the picture

There is a moon in the picture

There is a blanket in the picture      Lit<sub>d</sub> - 3

Kindergarten, male

Rousseau: "The Sleeping Gypsy"

Water, jug, the moon, mountains, stick

It looks like the lion is going to eat her up.

Lit<sub>d</sub> - 3

A - P - 1

Grade one, female

Matisse: "Still life with goldfish"

I like this because it has nice fish on them and the leaves and flowers around them. I like this little plant.

These flowers are really nice.

I like the colors of the fish and these flowers.

Ev - 1

C<sub>d</sub> - 3

Lo - 1

Lit<sub>d</sub> - 3

MA - 3

Grade one, male

Rousseau: "The Sleeping Gypsy"

I see the man in the moon. Is that lady sleeping? The lion is going to tear her clothes off because lions are king of beast and they're always doing stuff like that.

The lion's tail at the end shouldn't be up. Its always down.

Those are mountains up there.

D - 1

Lit<sub>d</sub> - 3

Lit<sub>i</sub> - 3

A - P - 1

Lo - 1



Grade two, female

Renoir: "The Two Sisters"

It looks like fall.

Its out in the country.

Some girls are sitting on a log.

I think, one is holding flowers.

They look as if they're getting their pictures taken.

It looks like its on a farm.

Lit<sub>d</sub> - 3

A-P - 1

Lit<sub>i</sub> - 1

Grade, two, male

Renoir: "The Two Sisters"

I like it because it's got all colors

in it and that. I'm thinking about the things in the back.

It looks like an animal. There's a bird in a tree back there.

Ev - 1

C<sub>d</sub> - 3

D - 1

Lit<sub>d</sub> - 3

Lit<sub>i</sub> - 1

Grade four, female

Riopelle: "Du Noir Qui se Leve"

I like the way he's got this, like its mod., you know.

I like that.

It's got a whole lot of different shapes and they blend in

You got one going this way, one going down, and they're all going every way.

The colors blend in like these ones down here.

He blended in those red, blue, blue-black, lot of orange and yellow.

D - 1

NS - 3

S<sub>d</sub> - 3

RA - 1

C<sub>d</sub> - 3

S<sub>fa</sub> - 1

NA - 1

A - 1

MA - 2



Grade four, male

Degas: "Race Horses"

They're going out there on the horses.

They have the dogs someplace chasing the fox.

They'll catch the fox and they'll probably skin it or something.

Its early in the morning.

Lit<sub>i</sub> - 1

Lit<sub>d</sub> - 3

A - P - 1

D - 1





## APPENDIX G



# TAXONOMY OF THE COGNITIVE DOMAIN--CRITERIA

---

## LEVEL ONE: KNOWLEDGE

1. (1) - Simple identification and recall of things, art elements, names, places.
  2. (m) - Identifies periods, styles, movements. Relates time and style to painting--to artist. Simple description of line, color, action, placement (things).
  3. (h) - Identifies or is aware of interrelationships of art elements. Identifies principles of design: balance, harmony, etc. States a generalization.
- 

## LEVEL TWO: COMPREHENSION

4. (11) - Translates images, elements, symbols into words. Conveys an idea, "successful," "works well."
  5. (mm) - Translates or paraphrases by simile or metaphor: "like. . ." "as. . ." Interprets artists intention. Mentions word "artist. . ."
  6. (hh) - Identifies or interprets interrelationship of visual elements, design principles and subject content. Identifies artist's true intentions resulting from his skillful application of principles of design, e.g., feeling and form = successfull, good quality.
- 

## LEVEL THREE: ANALYSIS/SYNTHESIS

7. (L1) - Indicates an intuitive/unique but meaningful interpretation based on factors inherent in work viewed. Makes superior personal philosophical judgment in terms of this painting referring to internal evidence such as design principles, sensory qualities.
-



8. (Mm) - Uses important principles of art to explain the value or significance of the painting: "organic unity," "content," "quality."
- 
9. (Hh) - Brings together criteria and standards of other art styles in relationship to present painting. Makes a significant philosophical interpretation based on factors inherent in the painting (not necessarily dealing with art or aesthetics).
- 

#### LEVEL FOUR: EVALUATION

10. (LL) - Makes a meaningful philosophical observation based on aesthetic values or understandings in intellectual terms, such as: "the inherent rhythm of the universe," "organic unity."
- 
11. (MM) - Use all available information for a unique and meaningful judgment of the worth and significance of the painting using artist's own terms.
- 
12. (HH) - Judgment in terms of internal and external criteria comparing to the highest known standards of recognized excellence, past and present. A global concept.
-





## TAXONOMY OF THE AFFECTIVE DOMAIN--CRITERIA

---

RECEIVING 1. (1) - Simple emotional exclamation.

AND - Simple like/dislike.

RESPONDING - Descriptive statement including terms "It seems," "I felt," a feeling of--"fair," "nice," "harmonious."

---

2. (m) - Relates expression of like or dislike to a category or type of art he likes.
- "Good"/"Bad," "Beautiful."
  - Refers to a specific part or aspect he prefers because. . . . (affective description).
  - Likens to a condition of nature, literal, simple comparison to objects in nature, not people.
- 

3. (h) - Strong emotional acceptance, "very strong."
- Reference to strong mood evoked - "excellent."
  - "Excellent"/"Atrocious," "mysterious."
  - Reference to human or social needs evoked (human condition or desire for action), "so . . . ."
- 

VALUING 4 (L1) - Expresses desire to produce similar work

- Identifies emotional content-value
- Wants to own art piece

---



5. (Mm) - Interprets emotional content-value.  
 - Uses emotional simile "like," "as. . ."
- 

6. (Hh) - Values as a museum piece.  
 - Expresses how others might or should feel about the work.  
 - Projection
- 

- ORGANIZING 7. (LL) - Relates to newly acquired values. Sees dominant values.  
 AND  
 RE-EVALUATING  
 - Indicates significant change of emotional attitude towards the painting.  
 - Common philosophical observation with affective overtones:
- 

8. (MM) - Clear recognition of own system of aesthetic values.  
 Relates to life objectives.  
 - Comparative philosophical observation with affective overtones. Compares different philosophies.
- 

9. (HH) - Unquestionable affective-attitudinal acceptance of highly abstract expression. High level of philosophy.



## APPENDIX H



AN EXAMPLE OF THE SCORING PROCEDURE USED FOR THE  
GROOME ART APPRECIATION RESPONSE SCALE

---

Subject: male, kindergarten

Painting: "The Sleeping Gypsy: Rousseau, T.

1. Tell me the first thing you think or feel when you look at this painting?

"The lion looks kind of funny because of the hair back here."

2. Tell me about the color, shapes, and lines.

a. "white, brown; that's white."

b. "shape of dish; square."

c. "lines in skirt."

3. How does the artist's use of color, shapes, and lines make you feel?

" . . . like I have a lot of colors on me."

4. What stands out in the painting? How does the artist make it stand out?

"The lion. I don't know."

5. Is there something in the painting that you can see more than one of . . . show me.

"Yes." (The subject points to a series of shapes representing stars).

6. Is this a good painting? Why?

"Yes. 'cause I like the lion."

---





RECORDING SHEET IN THE COGNITIVE DOMAIN OF THE  
ART APPRECIATION RESPONSE SCALE[illegible]



RECORDING SHEET IN THE AFFECTIVE DOMAIN OF THE  
ART APPRECIATION RESPONSE SCALE

	1	2	3	4	5	6	7	8	9
1		X							
2a									
2b									
2c									
3a			X						
3b									
3c									
4									
5									
6		X							



## APPENDIX I





TABLE VIII

ANALYSIS OF VARIANCE ON DESCRIPTION SUBTEST OF THE  
WILSON ASPECTIVE PERCEPTION TEST

SOURCE	D.F.	MEAN SQUARE	F. RATIO	P
SEX	1	4.117	.650	.421
GRADE	3	37.716	5.594	.001
SEX & GRADE	3.	1.668	0.263	.852
ERROR	147.	6.334	-	

TABLE IX

SCHEFFÉ'S MULTIPLE COMPARISONS FOR GRADE ON DESCRIPTION  
SUBTEST OF THE WILSON ASPECTIVE PERCEPTION TEST

	K	1	2	4
K	1.000	.177	.316	.001
1		1.000	.988	.506
2			1.000	.294
4				1.000



ANALYSIS OF VARIANCE ON FORMAL ANALYSIS SUBTEST OF THE  
WILSON ASPECTIVE PERCEPTION TEST

INTERACTION TEST				
SOURCE	D.F.	MEAN SQUARE	F. RATIO	P
SEX	1	.192	.486	.487
GRADE	3	1.870	4.727	.004
SEX & GRADE	3	.504	1.275	.285
ERROR	147	.396		

TABLE XI

SCHEFFÉ'S MULTIPLE COMPARISONS FOR GRADE ON FORMAL ANALYSIS  
OF THE WILSON ASPECTIVE PERCEPTION TEST

	K	1	2	4
K	1.000	.273	.347	.005
1		1.000	.998	.607
2			1.000	.473
4				1.000



ANALYSIS OF VARIANCE ON INTERPRETATION SUBTEST OF  
THE WILSON ASPECTIVE PERCEPTION TEST

SOURCE	D.F.	MEAN SQUARE	F. RATIO	P
SEX	1	4.245	1.207	.274
GRADE	3	35.936	10.224	.001
SEX & GRADE	3	2.56	.729	.536
ERROR	147	3.52		

TABLE XIII

SCHEFFÉ'S MULTIPLE COMPARISONS FOR GRADE ON  
INTERPRETATION SUBTEST OF THE WILSON ASPECTIVE PERCEPTION TEST

	K	1	2	4
K	1.000	.009	.053	.001
1		1.000	.937	.599
2			1.000	.238
4				1.000



ANALYSIS OF VARIANCE ON EVALUATION SUBTEST OF THE  
WILSON ASPECTIVE PERCEPTION TEST

SOURCE	D.F.	MEAN SQUARE	F. RATIO	P
SEX	1	.011	0.058	.810
GRADE	3	1.470	7.97	.001
SEX & GRADE	3	.383	2.078	.106
ERROR	147	.185		

TABLE XV

SCHEFFE'S MULTIPLE COMPARISONS FOR GRADE ON EVALUATION  
OF THE WILSON ASPECTIVE PERCEPTION TEST

	K	1	2	4
K	1.000	.014	.002	.006
1		1.000	.977	.999
2			1.000	.994
4				1.000





ANALYSIS OF VARIANCE ON TOTAL SCORES OF THE  
WILSON ASPECTIVE PERCEPTION TEST

SOURCE	D.F.	MEAN SQUARE	F, RATIO	P
SEX	1	.379	0.036	.850
GRADE	3	211.164	19.973	.001
SEX & GRADE	3	10.191	0.321	.810
ERROR	147	1554.19		

TABLE XVII

SCHEFFE'S MULTIPLE COMPARISONS FOR GRADE  
ON TOTAL SCORE

	K	1	2	4
K	1.000	.001	.002	.001
1		1.000	.952	.157
2			1.000	.036
4				1.000



ANALYSIS OF VARIANCE ON AFFECTIVE SUBTEST OF THE  
GROOME ART APPRECIATION RESPONSE SCALE

SOURCE	D.F.	MEAN SQUARE	F. RATIO	P.
SEX	1	.725	0.112	.738
GRADE	3	73.673	11.392	.001
SEX & GRADE	3	5.671	0.877	.455
ERROR	147	6.467		

TABLE XIX

SCHEFFÉ'S MULTIPLE COMPARISONS FOR GRADE ON  
AFFECTIVE SUBTEST OF THE GROOME ART  
APPRECIATION RESPONSE SCALE

	K	1	2	4
K	1.000	.111	.001	.001
1		1.000	.416	.235
2			1.000	.985
4				1.000



ANALYSIS OF VARIANCE ON COGNITIVE SUBTEST OF THE  
GROOME ART APPRECIATION RESPONSE SCALE

SOURCE	D.F.	MEAN SQUARE	F. RATIO	P
SEX	1	8.477	0.398	.529
GRADE	3	926.859	43.530	.001
SEX & GRADE	3	23.741	1.115	.345
ERROR	147	21.293		

TABLE XXI

SCHEFFÉ'S MULTIPLE COMPARISONS FOR GRADE ON COGNITIVE SUBTEST  
OF THE GROOME ART APPRECIATION RESPONSE SCALE

	K	1	2	4
K	1.000	.001	.001	.001
1		1.000	.968	.007
2			1.000	.024
4				1.000



ANALYSIS OF VARIANCE ON TOTAL SCORES OF THE  
GROOME ART APPRECIATION RESPONSE SCALE

SOURCE	D.F.	MEAN SQUARE	F. RATIO	P
SEX	1	14.137	0.457	.500
GRADE	3	1504.89	48.629	.001
SEX & GRADE	3	24.285	0.785	.504
ERROR	147	30.946		

TABLE XXIII

SCHEFFE'S MULTIPLE COMPARISONS FOR GRADE ON  
TOTAL SCORES OF THE GROOME ART  
APPRECIATION RESPONSE SCALE

	K	1	2	4
K	1.000	.000	.001	.001
1		1.000	.701	.002
2			1.000	.058
4				1.000





## APPENDIX J



TABLE XXIV

MEANS AND STANDARD DEVIATION TABLE OF THE WILSON ASPECTIVE PERCEPTION TEST  
AND THE GROOME ART APPRECIATION RESPONSE SCALE

	K				1				2				4			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<u>Wilson Test</u>																
Description	3.939 (1.684)	4.552 (2.828)	5.667 (7.381)	5.357 (11.632)	4.938 (3.129)	5.625 (8.250)	6.313 (14.763)	6.688 (10.096)								
Analysis	1.000 (0.000)	1.000 (0.000)	1.133 (.206)	1.429 (1.341)	1.125 (.250)	1.375 (.650)	1.625 (.917)	1.375 (.650)								
Interpretation	1.545 (3.318)	1.724 (3.207)	3.467 (4.838)	2.714 (3.604)	3.188 (4.029)	2.375 (3.050)	3.750 (3.400)	3.750 (3.267)								
Evaluation	.061 (.059)	.138 (.123)	.267 (.210)	.571 (.264)	.563 (.263)	.375 (.250)	.500 (.267)	.375 (.250)								
Total	5.545 (6.318)	6.414 (6.608)	9.467 (11.124)	9.071 (28.072)	8.813 (5.896)	8.750 (10.733)	11.188 (16.829)	11.188 (9.629)								
<u>Groome Test</u>																
Affective	2.091 (2.335)	2.931 (2.995)	4.000 (6.714)	3.857 (11.670)	5.438 (12.129)	4.625 (7.317)	4.938 (8.996)	5.625 (7.983)								
Cognitive	9.121 (11.610)	9.759 (11.404)	16.867 (24.982)	15.000 (15.539)	15.313 (34.096)	17.750 (30.467)	19.750 (25.000)	20.500 (36.267)								
Total	11.212 (16.922)	12.690 (17.079)	20.867 (29.839)	18.857 (39.209)	20.750 (63.267)	22.375 (51.050)	24.688 (18.363)	26.125 (40.783)								

Number in parenthesis is the variance











**B29999**